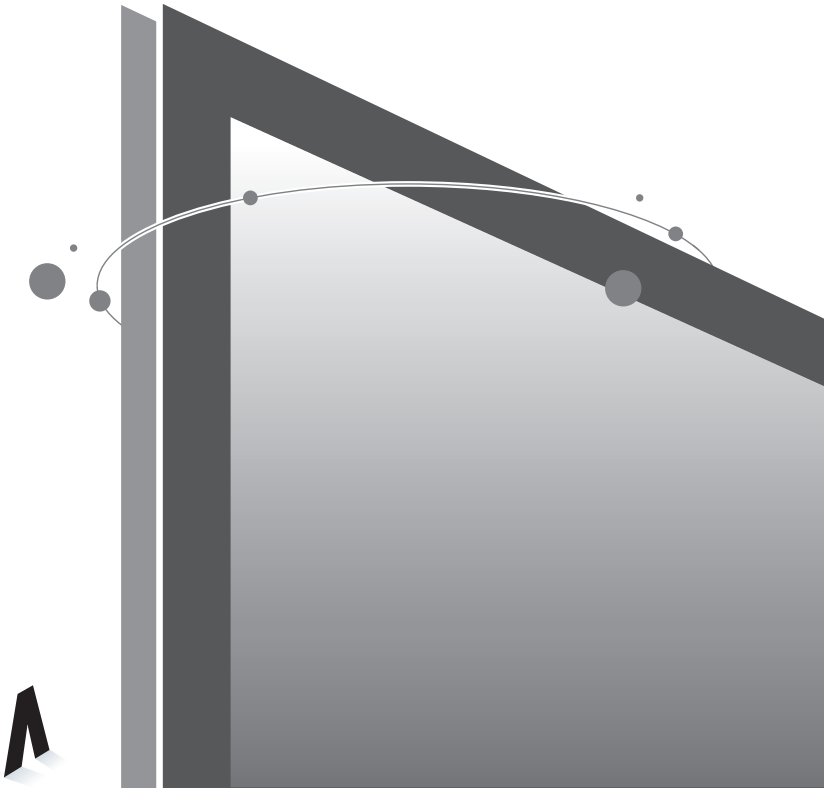
Panasonic

Operating Instructions
LCD TV

Model No. **TX-26LXD8A**



VIERA

DVB DOLBY DIGITAL

VIERA Link SD HC HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE

Please read these instructions before operating your set and retain them for future reference.
The images shown in this manual are for illustrative purposes only.

English

TQB0A0225

Customer's Record
The model number and serial number of this product may be found on its rear panel. You should note this serial number in the space provided below and retain this book, plus your purchase receipt, as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purposes.

Model Number _____ Serial Number _____

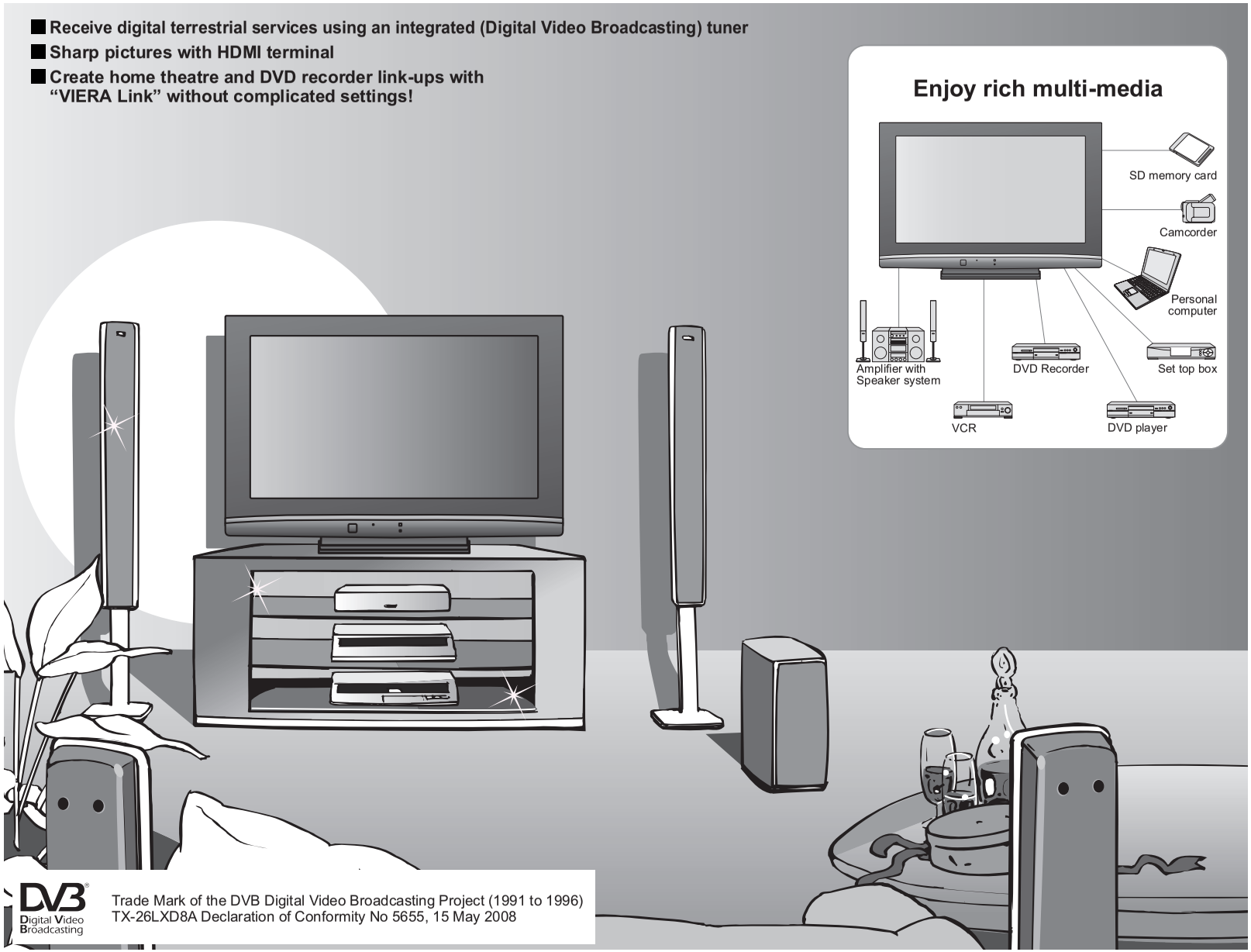
Panasonic Corporation
Web Site: http://panasonic.net/
© Panasonic Corporation 2008

Printed in China

Turn your own living room into a movie theatre!

Experience an amazing level of multi- media excitement

- Receive digital terrestrial services using an integrated (Digital Video Broadcasting) tuner
- Sharp pictures with HDMI terminal
- Create home theatre and DVD recorder link-ups with "VIERA Link" without complicated settings!



DVB Digital Video Broadcasting

Trade Mark of the DVB Digital Video Broadcasting Project (1991 to 1996)
TX-26LXD8A Declaration of Conformity No 5655, 15 May 2008

Contents

Be Sure to Read

- Safety Precautions ····· 4
  (Warning / Important Installation Notices)

Quick Start Guide

- Accessories / Options ····· 6
- Basic Connection ····· 7
- Identifying Controls ····· 8
- Auto Tuning ····· 9

Enjoy your TV!

Basic Features

- Watching TV ····· 10
- Using TV Guide ····· 13
- Watching Videos and DVDs ····· 14
- Viewing Teletext ····· 16

Advanced Features

- How to Use Menu Functions ····· 18
  (picture, sound quality, etc.)
- DVB Settings (DVB) ····· 22
- Editing Programmes ····· 24
- Tuning Programmes ····· 26
- Restore Settings ····· 28
- Input Labels ····· 29
- Displaying PC Screen on TV ····· 30
- HDMI Functions ····· 31
- Viewing from SD Card (Photos) ····· 32
- VIERA Link "HDAVI Control™" ····· 34
- External Equipment ····· 38

FAQs, etc.

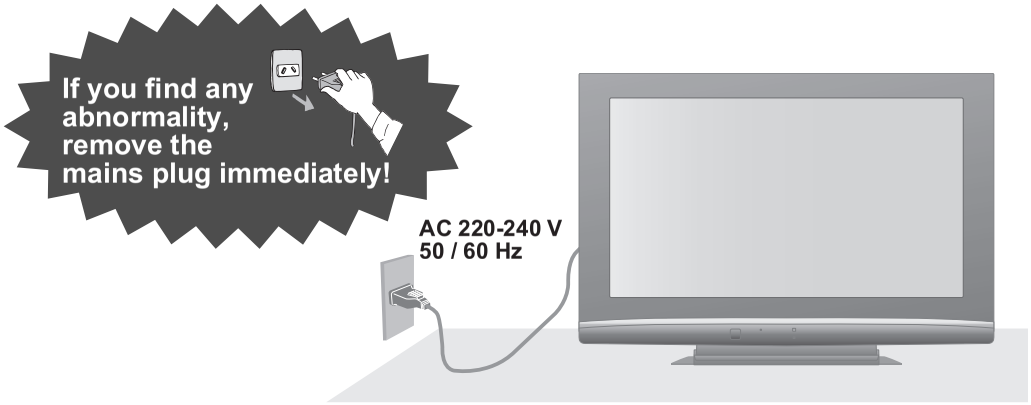
- Technical Information ····· 40
- FAQs ····· 43
- Maintenance ····· 45
- Licence ····· 45
- Specifications ····· 46
- WARRANTY ····· 47

Safety Precautions

Warning

Handling the mains plug and lead

- Insert the mains plug fully into the socket outlet. (If the mains plug is loose, it could generate heat and cause fire.)
- Ensure that the mains plug is easily accessible.
- Do not touch the mains plug with a wet hand. (This may cause electrical shock.)
- Do not damage the mains lead. (A damaged lead may cause fire or electrical shock.)
  - Do not move the TV with the lead plugged in the socket outlet.
  - Do not place a heavy object on the lead or place the lead near a high-temperature object.
  - Do not twist the lead, bend it excessively, or stretch it.
  - Do not pull on the lead. Hold onto the mains plug body when disconnecting lead.
  - Do not use a damaged mains plug or socket outlet.



Power source

- This TV is designed to operate on 220-240 V, 50 / 60 Hz AC.

Do not remove covers NEVER modify the TV yourself

(High-voltage components may cause serious electrical shock.)

- Have the TV checked, adjusted, or repaired at your local Panasonic dealer.

Keep liquids away from the TV

- To prevent damage which may result in fire or shock hazard, do not expose this appliance to dripping or splashing.
- Do not place containers with water (flower vase, cups, cosmetics, etc.) above the TV. (including on shelves above, etc.)

Do not expose to direct sunlight and other sources of heat

- Avoid exposing the TV to direct sunlight and other sources of heat. To prevent fire never place any type of candle or naked flame on top or near the TV.

Do not place foreign objects inside the TV

- Do not let metal or flammable objects drop into the TV through the air vents (fire or electrical shock may result).

Do not place the TV on sloped or unstable surfaces

- The TV may fall off or tip over.

Use only the dedicated stands / mounting equipment

- Using an unauthorized stand or other fixtures may make the TV shaky, risking injury. Be sure to ask your local Panasonic dealer to perform setup.
- Use optional stands / mounts (p. 6).

Do not allow children to handle SD card

- As with any small object, SD Cards can be swallowed by young children. Please remove SD Card immediately after use and store out of reach of children.

Important Installation Notices

■ Install TV on a stable surface

If a television is not positioned in a sufficiently stable location, it can be potentially hazardous due to falling. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- Using cabinets or stands recommended by the manufacturer of the television.
- Only using furniture that can safely support the television.
- Ensuring the television is not overhanging the edge of the supporting furniture.
- Not placing the television on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television to a suitable support.
- Not standing the televisions on cloth or other materials placed between the television and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the television or its controls.

■ When cleaning the TV, remove the mains plug

- Cleaning an energized TV may cause electrical shock.

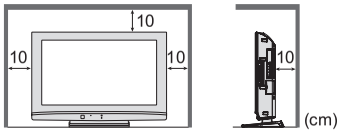
■ When the TV is not going to be used for a long period of time, remove the mains plug

- This TV will still consume some power even in the Off mode, as long as the mains plug is still connected to a live socket outlet.

■ Transport only in upright position

■ Allow sufficient space around the TV for radiated heat

Minimum distance



- When using the pedestal, keep the space between the bottom of the TV and the floor surface.
- In case of using Wall-hanging bracket, follow the manual of it.

■ Do not block the rear air vents

- Blocked ventilation by newspapers, table cloths, curtains, etc. may cause overheating, fire or electrical shock.

■ Do not expose your ears to excessive volume from the headphones

- Irreversible damage can be caused.

■ Auto power standby function

- If no signal is received and no operation is performed in Analogue TV mode for 30 minutes, the TV will automatically go to standby mode.

■ Keep the TV away from these types of equipment

- Electronic equipment
  In particular, do not place video equipment near the TV (electromagnetic interference may distort images / sound).
- Equipment with an infrared sensor
  This TV also emits infrared rays (this may affect operation of other equipment).

Accessories / Options

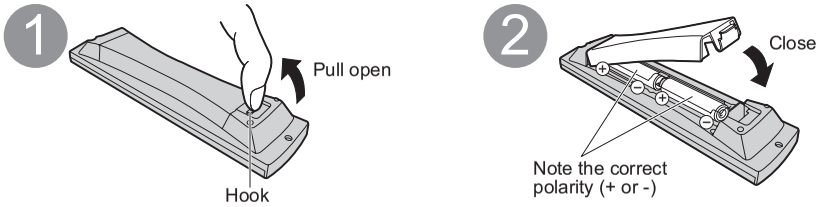
Standard accessories Check that you have the accessories and items shown ☑

☐Remote Control Transmitter
- N2QAYB000228

☐Batteries for the Remote Control Transmitter (2)
- R6 (AA)

☐Operating Instructions with Warranty statement

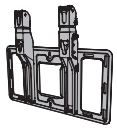
Installing remote's batteries



Caution
- Incorrect installation may cause battery leakage and corrosion, resulting in damage to the remote control.
- Do not mix old and new batteries.
- Do not mix different battery types (such as alkaline and manganese batteries).
- Do not use rechargeable (Ni-Cd) batteries.
- Do not burn or breakup batteries.
  Batteries must not be exposed to excessive heat such as sunshine, fire or the like.

Optional accessories

Wall-hanging bracket
- TY-WK32LR2W

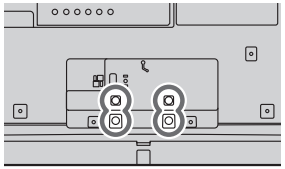


Please contact your nearest Panasonic dealer to purchase the recommended wall-hanging bracket. For additional details, please refer to the wall-hanging bracket installation manual.

WARNING!
- Failure to use a Panasonic bracket or choosing to mount the unit yourself will be done at the risk of the consumer.
  Any damage resulting from not having a professional installer mount your unit will void your warranty.
- Always be sure to ask a qualified technician to carry out set-up.
  Incorrect fitting may cause equipment to fall, resulting in injury and product damage.
- Do not mount the unit directly below ceiling lights (such as spotlights, floodlights or halogen lights) which typically give off high heat. Doing so may warp or damage plastic cabinet parts.

■ How to remove the TV Stand

Remove four screws.



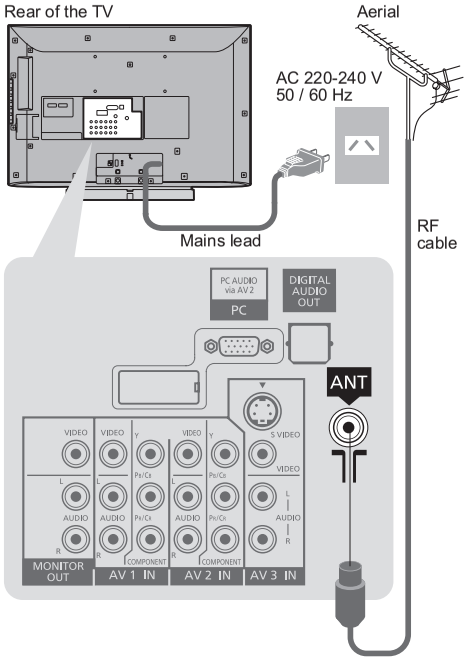
Rear of the TV

Basic Connection

External equipment and cables shown are not supplied with this TV.
Please ensure that the unit is disconnected from the mains socket before attaching or disconnecting any leads.

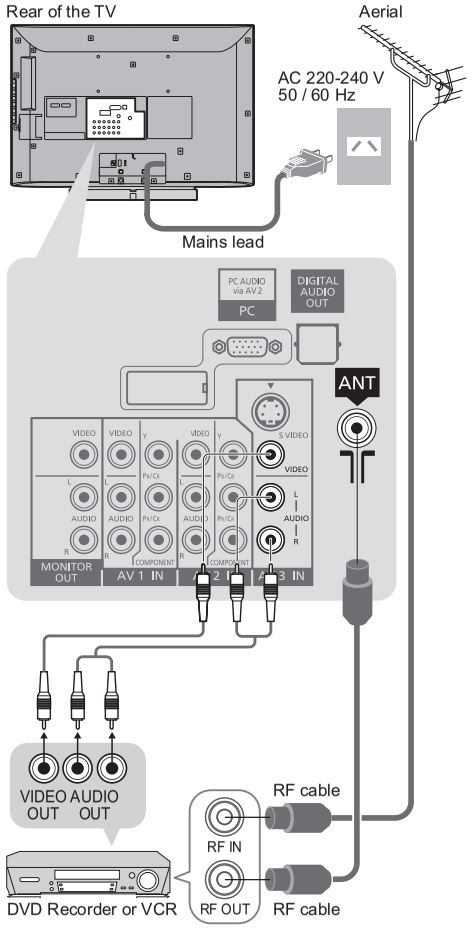
Example 1 Connecting aerial

TV only



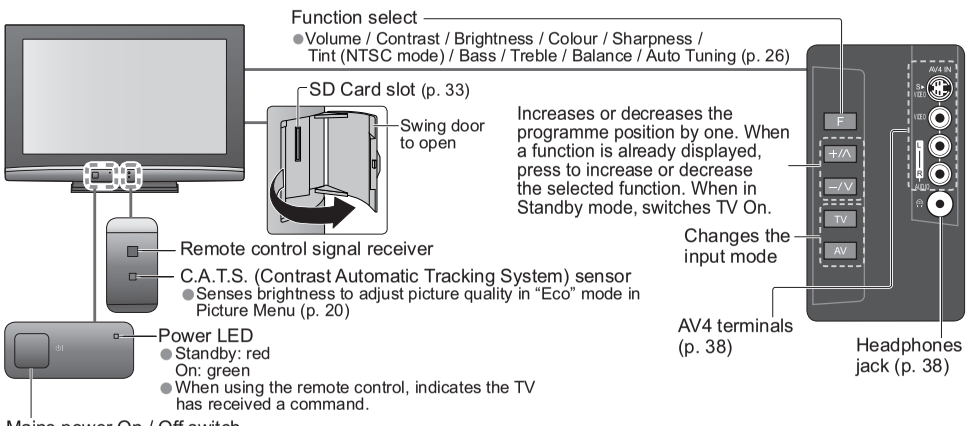
Example 2 Connecting DVD Recorder / VCR

TV, DVD Recorder or VCR
- If your recorder is not available for DVB ➡ p. 44



Note
- Do not put the RF cable close to the mains lead to avoid noise.
- Do not place the RF cable under the TV.
- To obtain optimum quality picture and sound, an Aerial, the correct cable (75 Ω coaxial) and the correct terminating plug are required.
- If a communal Aerial system is used, you may require the correct connection cable and plug between the wall Aerial socket and the TV.
- Your local Television Service Centre or dealer may be able to assist you in obtaining the correct Aerial system for your particular area and the accessories required.
- Any matters regarding Aerial installation, upgrading of existing systems or accessories required, and the costs incurred, are the responsibility of you, the Customer.

Identifying Controls



Standby On / Off switch
●Switches TV On or Off standby

Guide (p. 13)
●Displays TV Guide

OK
●Confirms selections and choices
●Press after selecting programme positions to quickly change programme (DVB) (p. 10)

Main Menu (p. 18)
●Press to access VIERA Link, Picture, Sound and Setup Menus

Aspect (p. 12)
●Changes aspect ratio from Aspect Selection list
●Also possible by pressing this button repeatedly until you reach the desired aspect

VIERA Link Menu (p. 35)
●Press to access VIERA Link Menu directly

Numeric buttons
●Changes programme and teletext pages
●When in Standby mode, switches TV On

Programme Information (p. 11)
●Displays programme information

Programme Up / Down
●Selects programme in sequence

Teletext (p. 16)
●Switches to teletext mode

Subtitles (p. 10)
●Displays Subtitles

VCR / DVD Panasonic equipment operations (p. 15)

Input mode selection
●TV - switches DVB / Analogue mode (p. 10)
●AV - switches to AV input mode from Input Selection list (p. 14)

Exit
●Returns to the normal viewing screen

Cursor buttons
●Makes selections and adjustments

Return
●Returns to the previous menu

Coloured buttons
●Used for the selection, navigation and operation of various functions

SD Card (p. 32)
●Switches to SD Card viewing mode

Option Menu (p. 11)
●Easy setting for viewing and sound options

Sound Mute
●Switches sound mute On or Off

Volume Up / Down

Hold
●Freeze / unfreeze picture (p. 10)
●Holds the current teletext page (teletext mode) (p. 17)

Index (p. 17)
●Returns to the teletext index page (teletext mode)

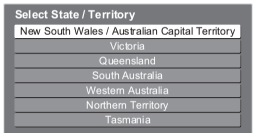
Auto Tuning

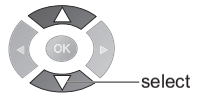
Search and store TV channels automatically.
These steps are not necessary if the setup has been completed by your local dealer.

1 Plug the TV into mains socket and switch On

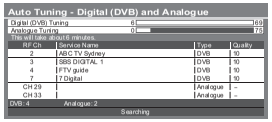
●You can now use the remote control to turn On the TV or turn the TV to standby mode. (Power LED: On)

2 Select your state



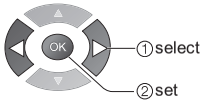


3 Start Auto Tuning



●Auto Tuning will start to search for TV services and store them in the numbered order as specified by the broadcasters.

4 Select the picture setting



●"Home" is the recommended mode for viewing at home. Select "Home" for optimal picture / power consumption. "Shop" is for in-store display.
●If "Shop" is selected, the word "Shop" appears every time the TV is switched on. (p. 10)
Home: "Viewing Mode" is set as "Normal". (p. 20)
Shop: "Viewing Mode" is set as "Dynamic". (p. 20)

Auto Tuning is now complete and your TV is ready for viewing.

●To edit channels
➡ Editing Programmes (p. 24)
●If tuning has failed
➡ "Auto Tuning" (p. 27).
●If you turned the TV Off during Standby mode last time, the TV will be in Standby mode when you turn the TV On with Mains power On / Off switch.

Using the On Screen Displays

Many features available on this TV can be accessed via the On Screen Display menu.

■ How to use remote control

MENU — Open the main menu

Move the cursor / select the menu

Move the cursor / adjust levels / select from a range of options

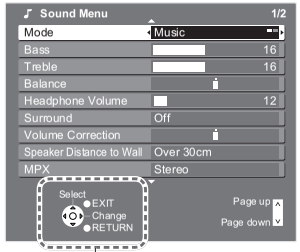
OK — Access the menu / store settings after adjustments have been made or options have been set

RETURN — Return to the previous menu

EXIT — Exit the menu system and return to the normal viewing screen

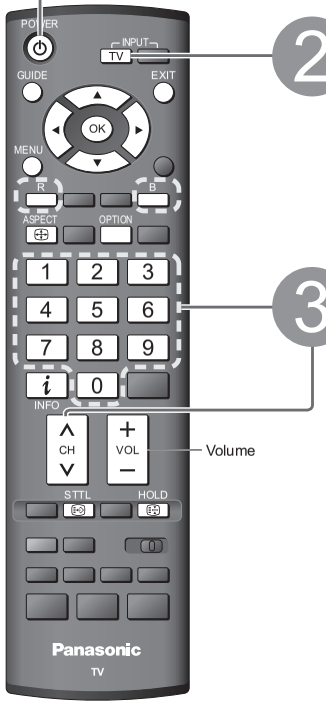
■ ON SCREEN HELP Instructions box

(example: Sound Menu)



On-screen operation guide will help you.

Watching TV



1 Turn power on

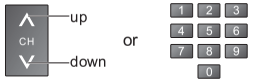
- Mains power On / Off switch should be On. (p. 8)
- If “Shop” is displayed on the top right of the screen, reset settings in “Shipping Condition” (p. 28), and select “Home” in “Auto Tuning” (p. 9).

2 Select DVB (Digital Video Broadcasting) or Analogue mode

- Also possible to select the mode using the TV button on the front panel of the TV. (p. 8)

Information banner appears whenever you select a programme
- For details ➡ p. 11

3 Select a programme



- To select the two or three-digit programme number, e.g. 39 ➡ 3 ➡ 9 (in a short time)
- If one or two-digit programme number ➡ OK ➡ quickly changes the programme

- To select from the Programme List ➡ OK

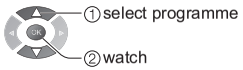
■ Select a programme using Information banner (p. 11)

Possible to confirm the programme name before selecting programmes.

Display Information banner if it is not displayed

- Possible to set display timeout in “Banner Display Timeout” (p. 21).

While the banner is displayed, select the programme

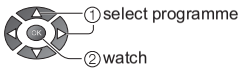


■ Select a programme using TV Guide (p. 13)

Possible to confirm the TV Guide (EPG) before selecting programmes.

Display TV Guide

Select the programme



Note
- When the TV is switched to standby, there will be a clicking sound after a short delay. This is normal.

■ Other useful functions

Hold	**Freeze / unfreeze picture**	HOLD
Display subtitles	**Display / hide subtitles** (if available) ● Channel changing is also possible when this function is active.	STTL

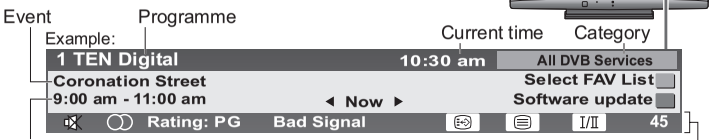
■ Other useful functions

Display Information banner

Display Information banner

INFO

- Also appears when changing a programme



DVB: Event Start / Finish time
Analogue: Programme status

Features available / Message meanings

Sound mute On	Subtitle service available
◌◌, I, II, ▽ Audio mode (Analogue mode) (p. 41)	Teletext service available
Rating: Rating information (p. 40)	I/II Multiple audio available (DVB mode)
Bad signal Poor TV signal quality	**1 - 90** Off Timer remaining time ● For settings ➡ see below
Encrypted Scrambled programme	

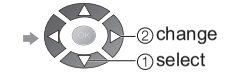
- To confirm another tuned programme name ➡ OK
- To change the category (To select a Fav List if you have defined) ➡ B
- Information on the next event ➡ OK (DVB mode)
- To watch the programme listed in the banner ➡ OK
- To download new software to TV ➡ R “System Update Search Now” (p. 23)
- To hide ➡ EXIT
- To set display timeout ➡ “Banner Display Timeout” (p. 21)
- Extra information ➡ INFO (press again to hide the banner) (DVB mode)

Display the selectable settings for the current programme

Check or change the current programme status instantly

OPTION

- To change



MPX (Analogue mode)
➡ Sound Menu (p. 20)

Volume Correction
Adjusts volume of individual programme or input mode

Audio Selection (DVB mode)
➡ Sound Menu (p. 20)
Allows you to select between alternative language for sound tracks (if available)

Note
- Also possible to change the settings in Menu list (p. 20 and p. 21).

Off Timer

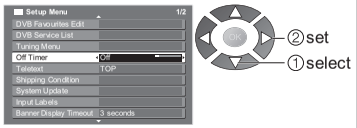
Turn the TV off automatically after a fixed period

Display the menu

MENU

Select “Setup”

Select “Off Timer” and set the time



- To cancel ➡ Set to “Off” or turn the TV off.
- To display the remaining time ➡ Information banner (above)
- When the remaining time is within 3 minutes, the remaining time will flash on screen.

Watching TV

■ **Other useful functions**

Change aspect ratio

Change the aspect ratio

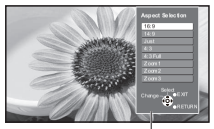
ASPECT

Enjoy viewing the picture at its optimum size and aspect.

Display Aspect Selection list → While the list is displayed, select the mode

ASPECT

② store
① select



Aspect Selection list

- To change the mode using the ASPECT button only
  ASPECT → (Press repeatedly until you reach the desired mode)

16:9

Directly displays the image at "16:9" without distortion (anamorphic).

14:9

Displays the image at the standard "14:9" without distortion.

Just

Displays a "4:3" image full-screen. Stretching is only noticeable at the left and right edges.

4:3

Displays the image at the standard "4:3" without distortion.

4:3 Full

Displays a "4:3" image enlarged horizontally to fit the screen.
- Only available in DVB mode or HD signal

Zoom1

Displays a "16:9" letterbox or "4:3" image without distortion.

Zoom2

Displays a "16:9" letterbox (anamorphic) image full-screen without distortion.

Zoom3

Displays a "2.35:1" letterbox (anamorphic) image full-screen without distortion. At "16:9", displays the image at its maximum (with slight enlargement).

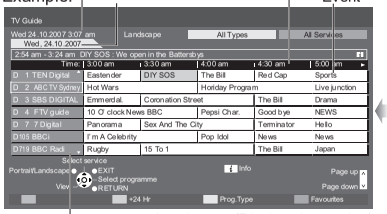
Note
- Only "16:9" and "4:3 Full" are available in DVB mode.
- Only "16:9" and "4:3" are available in PC mode.
- Not available in teletext mode.
- Aspect mode can be memorized separately for SD (Standard definition) and HD (High definition) signals. (except DVB mode)

Using TV Guide

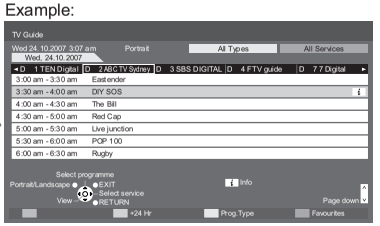
Using TV Guide enables you to select programme easily, view event informations, etc.
TV Guide—Electronic Programme Guide (EPG) provides an on-screen listing of the programmes currently broadcast and the future broadcasts over the next seven days (depending on the broadcasters).
- Analogue programmes will be listed after DVB programmes. "D" means DVB programme and "A" means Analogue programme.

GUIDE

View TV Guide
Each time pressed, the layout will be changed.
(Landscape / Portrait)

Example:


Landscape (Displays by service)

Example:


Portrait (Displays by time)

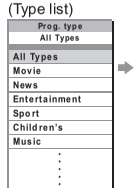
■ **To the previous day** (DVB mode) → R

■ **To the next day** (DVB mode) → G

■ **To watch the programme**
Select the event or programme now on the air
① select
② watch

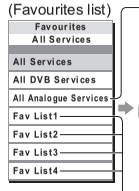
■ **To return to TV**
EXIT

■ **To view a programme list of the selected type** (DVB mode)

(Type list)


Y → ① select type ② view

■ **To view a programme list of the selected favourites list**

(Favourites list)


Only Analogue TV programmes are listed

B → ① select a favourites list ② view

To list favourite programmes ➡ p. 25

■ **To view details of the event** (DVB mode)
Select the event → select → INFO
- Press again to return to TV Guide.

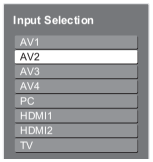
Note
- When this TV is turned on for the first time, or the TV is switched off for more than a week, it may take some time before the TV Guide is completely shown.

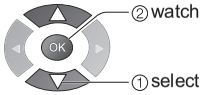
Watching Videos and DVDs

Connect the external equipment (VCRs, DVD equipment, etc.) and you can watch the input.
● To connect the equipment ➡ p. 7
The Remote Control is capable of operating some functions of selected Panasonic external equipment.

1 Display the Input select menu

2 Select the input mode connected to the equipment

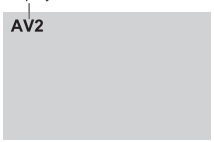




- You can also select the input using the AV button on the remote control or the side panel of the TV.
  Press the button repeatedly until the desired input is selected.
- You can label or skip each input modes ➡ “Input Labels” (p. 29)

3 View

Displays the selected mode



■ To return to TV
➡ TV

Note
- If the external equipment has an aspect adjustment function, set to “16:9”.
- For details, see the manual of the equipment or ask your local dealer.

Panasonic equipment connected to the TV can be directly operated with the remote control.

VCR DVD	**VCR / DVD switch∗** Select VCR to operate Panasonic VCR or DVD equipment Select DVD to operate Panasonic DVD equipment or Player home theatre
POWER	**Standby** Set to Standby mode / Turn on
▶	**Play** Playback videocassette / DVD
■	**Stop** Stop the operations
⏮ ◀◀	**Rewind / Skip / Search** VCR: Rewind, view the picture rapidly in reverse DVD: Skip to the previous track or title Press and hold to search backward
⏭ ▶▶	**Fast-forward / Skip / Search** VCR: Fast-forward, view the picture rapidly forward DVD: Skip to the next track or title Press and hold to search forward
II/I▶	**Pause** Pause / Resume DVD: Press and hold to play at slow speed
PROGRAMME	**Programme Up / Down** Select programme
REC	**Record** Start recording

∗Setting your remote control to operate Panasonic VCR, DVD, etc.

① Set the VCR / DVD switch to the appropriate position ➡ VCR DVD

② Press and hold POWER during the following operations

Enter the appropriate code for the equipment to be controlled, see table below ➡ Press ■

“VCR” position

Equipment	Code
VCR	10 (default)
DVD	11

“DVD” position

Equipment	Code
DVD	70 (default)
Player home theatre	71

Note
- Confirm if the remote control works correctly after changing the code.
- The codes will be reset to default values if batteries are replaced.
- “DVD” means DVD player, DVD recorders and Recorder home theatre.
- Some operations may not be possible on some equipment models.

Viewing Teletext

You can enjoy teletext broadcasting, including news, weather forecasts and subtitles, if this service is provided by the broadcasters.

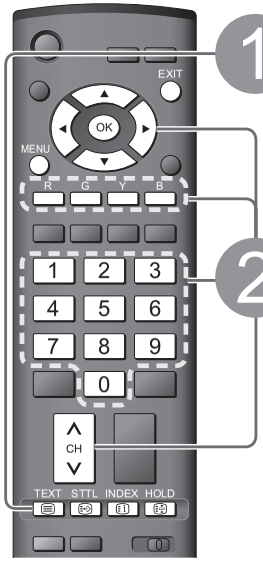
What is FASTEXT mode?
In FASTEXT mode, four differently coloured subjects are situated at the bottom of the screen. To access more information about one of these subjects, press the appropriately coloured button. This facility enables fast access to information on the subjects shown.

What is TOP mode? (in case of TOP text broadcasting)
TOP is a particular improvement of the standard teletext service that results in an easier search and effective guide.
- Fast overview of the teletext information available
- Easy to use step-by-step selection of the topical subject
- Page status information at the bottom of the screen

Available page up / down ➡ R G
To select among subject blocks ➡ B
To select next subject within the subject block (After the last subject, it moves to the next subject block.) ➡ Y

What is List mode?
In List mode, four differently coloured page numbers are situated at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory. ("Store frequently viewed pages", p. 17)

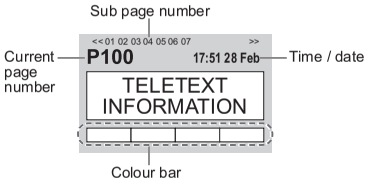
■ **To change mode** ➡ "Teletext" in Setup Menu (p. 21)



1

Switch to Teletext

TEXT ● Displays Index (content varies depending on the broadcasters)



2

Select the page (up to page 899)

1 2 3 / 4 5 6 / 7 8 9 / 0 or OK or CH or R G Y B (Corresponds to the colour bar)

■ **To adjust contrast** ➡ MENU (Press three times) ➡ OK — As the blue bar is displayed

■ **To return to TV** ➡ TEXT or EXIT

■ **Using teletext conveniently**

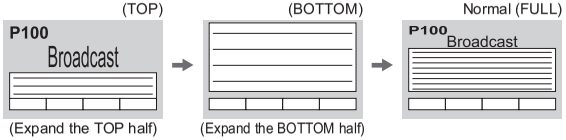
Reveal hidden data

Reveal hidden words e.g. quiz page answers

MENU ➡ R ■ **Re-hide** ➡ R

FULL / TOP / BOTTOM

MENU ➡ G



HOLD

Stop automatic updating
(If you wish to hold the current page without updating)
HOLD ■ **To resume** ➡ HOLD

INDEX

Return to the main index page
INDEX

Call up subtitles

Display subtitles
STTL
- Call up P801 (subtitle page) if available.
- If you press this button during P801 is displayed, teletext mode will be cancelled and return to TV.

View in multi window

Watch TV and Teletext in two windows at once

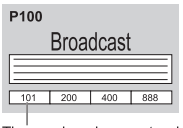
MENU (Press twice) ➡ OK
- Select Picture and text On or Off

- Operations can be made only in Teletext screen.

Store frequently viewed pages

Store frequently viewed pages in the colour bar (List mode only)

As page is displayed — Corresponding colour button ➡ OK press and hold



■ **To change stored pages**

Colour button you want to change ➡ Enter new page number 1 2 3 / 4 5 6 / 7 8 9 / 0 ➡ OK press and hold

View sub page

View sub page (Only when teletext is more than one page)

OK <<01 02 03 04 05 — Appears at top of the screen

■ **To view specific sub page**

MENU ➡ B ➡ T**** Broadcast ➡ Enter the 4-digit number (example: P6 0 0 0 6) ➡ T0006

- Sub pages:
  The number of sub pages varies depending on the broadcasters (up to 79 pages).
  It may take some time for searching, during which time you can watch TV.

Watch TV while waiting for update

View the TV picture while searching for a teletext page
Teletext automatically updates itself when new information becomes available.
Changes to TV screen temporarily

MENU ➡ Y ➡ ➡ Y ➡ View the updated page

(You cannot change the programme.)

- The news page provides a function that indicates arrival of latest news ("News Flash").

How to Use Menu Functions

Various menus allow you to make settings for the picture, sound, and other functions.

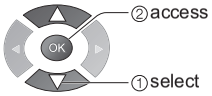
1 Display the menu

MENU

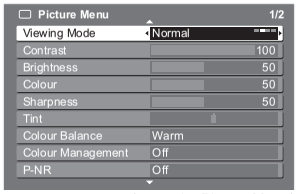
● Displays the functions that can be set (varies according to the input signal)

2 Select the menu

(example: Picture Menu)

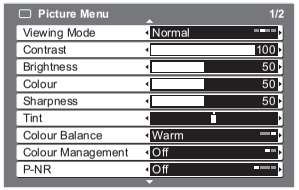


3 Select the item

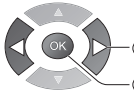


(example: Picture Menu)

4 Adjust or select



(example: Picture Menu)



■ To return to TV at any time

EXIT

■ To return to the previous screen

RETURN

■ To change menu pages

CH up / down

■ Choose from among alternatives

Number and positions of alternatives

Changed

■ Adjust using the slide bar

Moved

■ Go to the next screen

Displays the next screen

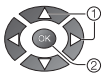
■ To reset the settings

- To reset the picture settings only
  ➡ "Reset Picture Defaults" in Picture Menu (p. 20)
- To reset the sound settings only
  ➡ "Reset Sound Defaults" in Sound Menu (p. 20)
- To initialize all settings
  ➡ "Shipping Condition" in Setup Menu (p. 28)

■ Enter characters by free input menu

You can enter names or numbers freely for some items.

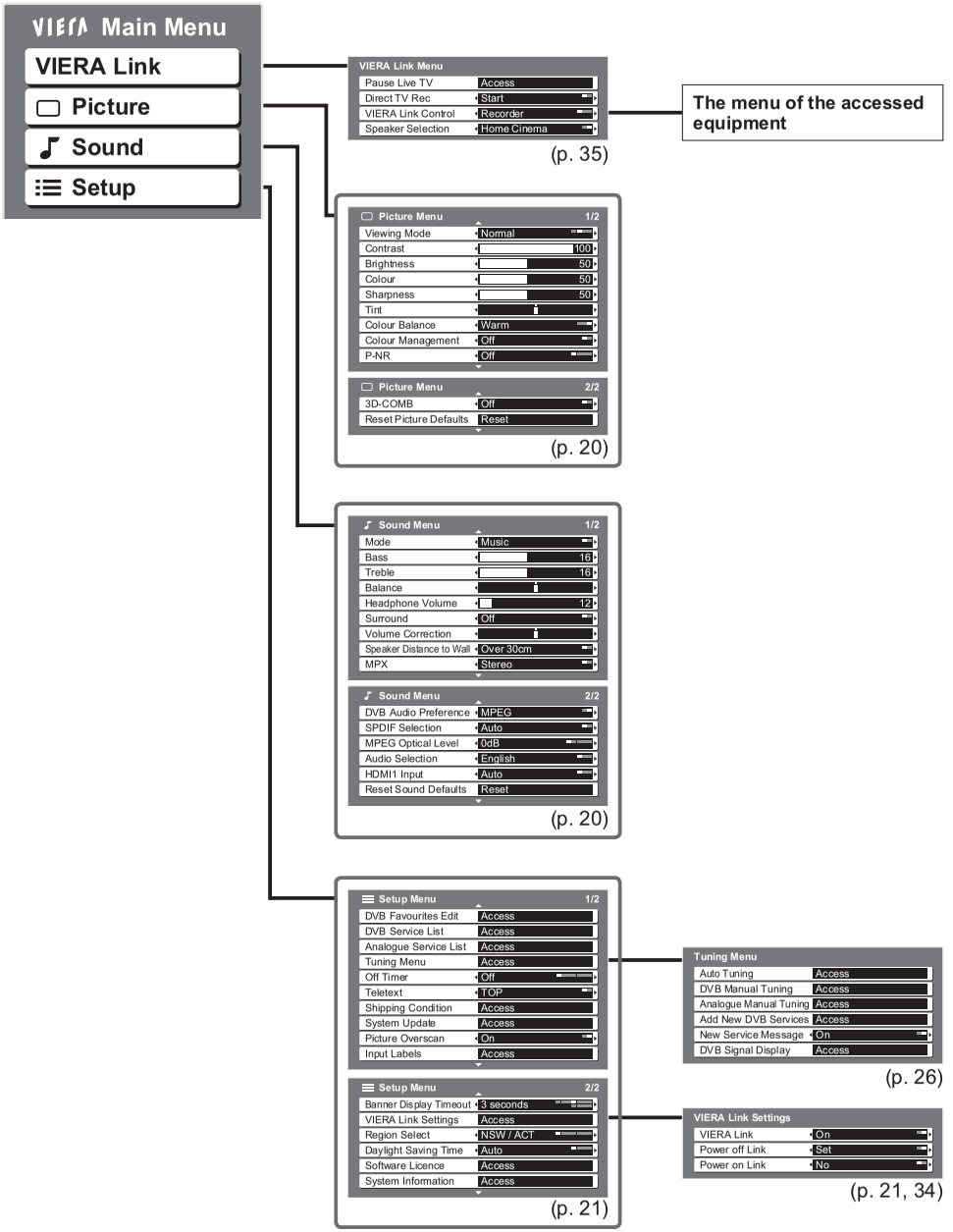
Set characters



Store

RETURN

■ Overview



● Depending on the received signals, available items are varied.

How to Use Menu Functions

■Menu list

Menu	Item	Adjustments / Configurations (alternatives)
VIERA Link	Pause Live TV	Controls the connected equipment with VIERA Link function, and enables various convenient recording, playback, etc. (p. 34 - 37) ● You can also access VIERA Link Menu directly using the VIERA Link button on the remote control.
	Direct TV Rec	
	VIERA Link Control	
	Speaker Selection	
Picture	Viewing Mode	Basic picture mode **(Dynamic / Normal / Cinema / Eco)** Dynamic : Provides enhanced picture contrast and sharpness when viewing in a bright room Normal : Recommended for viewing under normal ambient room lighting conditions Cinema: For watching movies in a darkened room producing a cinema-like picture Eco : Adjusts picture settings automatically dependent on ambient lighting conditions ● Set for each input signal
	Contrast, Brightness, Colour, Sharpness	Increases or decreases the levels of these options according to your personal preference
	Tint	With an NTSC signal source connected to the TV, the picture hue can be adjusted to suit your taste ● For NTSC or Component / HDMI input signal reception only
	Colour Balance	Allows you to set the overall colour tone of the picture **(Cool / Normal / Warm)**
	Colour Management	Automatically adjusts colours to vivid ones **(Off / On)** ● Not valid on PC signal
	P-NR	Picture Noise Reduction Automatically reduces unwanted picture noise and flicker noise in the contoured parts of a picture **(Off / Min / Mid / Max)** ● Not valid on PC signal
	3D-COMB	Occasionally, whilst viewing still or slow moving pictures, colour patterning may be seen Set to “On” to display sharper and more accurate colours **(Off / On)** ● For PAL or NTSC signal reception only ● Not valid on S-Video, Component, PC, HDMI and SD Card
	Reset Picture Defaults	Press the OK button to reset Viewing Mode on all inputs to default settings.
Sound	Mode	Basic sound mode **(Music / Speech)**
	Bass	Increases or decreases level to enhance or minimise lower, deeper sound output
	Treble	Increases or decreases level to enhance or minimise sharper, higher sound output
	Balance	Adjusts volume level of right and left speakers
	Headphone Volume	Adjusts the volume of the headphones
	Surround	Surround sound settings **(Off / On)**
	Volume Correction	Adjusts volume of individual programme or input mode
	Speaker Distance to Wall	Adjusts the low frequency sound **(Over 30cm / Up to 30cm)** ● If the back space between the TV and wall is over 30 cm, “Over 30cm” is recommended. ● If the back space between the TV and wall is within 30 cm, “Up to 30cm” is recommended.
	MPX	Select stereo / monaural **(Mono / Stereo)** (p. 41) ● Normally: Stereo ● Stereo signal cannot be received: Mono ● M1 / M2: Available while mono signal is transmitted ● Analogue mode only
	DVB Audio Preference	Selects the initial setting for Audio tracks **(Dolby Digital / MPEG)** If programme has both Dolby Digital and MPEG audio tracks, priority is given to what you select Dolby Digital:A method of coding digital signals developed by Dolby Laboratories. Apart from stereo (2ch) audio, these signals can also be multi-channel audio. MPEG:An audio compression method that compresses audio to small size without any considerable loss of audio quality. ● DVB mode only
	SPDIF Selection	Selects the initial setting for digital audio output signal from DIGITAL AUDIO OUT terminal **(Auto / PCM)** Auto: Dolby Digital is output as Dolby Digital Bitstream. MPEG is output as PCM. PCM:Dolby Digital is output as PCM. MPEG is output as PCM. ● DVB mode only
	MPEG Optical Level	You can adjust the audio level of MPEG output from DIGITAL AUDIO OUT terminal as the initial setting ● 0dB to -12dB in -2dB reductions ● DVB mode only
	Audio Selection	Selects the preferred language for DVB multi audio (depending on the broadcaster)
	HDMI1 Input	Select to fit the input signal **(Auto / Digital / Analogue)** (p. 31) Auto: Automatic detection of digital or analogue sound source Digital: HDMI cable connection Analogue: HDMI-DVI adapter cable connection ● HDMI input mode only ● HDMI2 terminal is for digital signal only ● No setting for HDMI2 available
	Reset Sound Defaults	Press the OK button to reset the present Sound Mode to the default settings

■Menu list

Menu	Item		Adjustments / Configurations (alternatives)
Setup	DVB Favourites Edit		Creates list of favourite programmes (p. 25)
	DVB Service List		Skips the unwanted DVB programmes (p. 25)
	Analogue Service List		Skips the unwanted Analogue programmes or edits Analogue programmes (p. 25)
	Tuning Menu	Auto Tuning	Automatically sets the programmes received in the area (p. 27)
		DVB Manual Tuning	Sets the DVB programmes manually (p. 27)
		Analogue Manual Tuning	Sets the Analogue programmes manually (p. 27)
		Add New DVB Services	Adds new DVB services (p. 27)
		New Service Message	Selects whether to give a notification message when a new DVB service is found (p. 27)
		DVB Signal Display	Checks the DVB signal condition (p. 27)
	Off Timer		Sets the time the TV automatically turns Off **(Off / 15 / 30 / 45 / 60 / 75 / 90 minutes)**
	Teletext		Teletext display mode **(TOP (FASTEXT) / List)** (p. 16)
	Shipping Condition		Resets all settings, for example, when moving house (p. 28)
	System Update		Downloads new software to TV (p. 23)
	Picture Overscan		Selects the screen area displaying the image **(Off / On)** On : Enlarged the image to hide the edge of the image. Off : Displayed the image in the original size. ● Set to “On” if noise is generated on the edge of the screen. ● This function is available when aspect is set to 16:9. ● This function can be memorized separately for SD (Standard definition) and HD (High definition) signals.
	Input Labels		Labels or skips each input terminals (p. 29)
	Banner Display Timeout		Sets how long the information banner (p. 11) stays on screen ● 0 (No display) to 10 sec. in 1-sec. increments
	VIERA Link Settings	VIERA Link	Sets to use VIERA Link functions **(Off / On)** (p. 34)
		Power off Link	Sets to use Power off Link function **(No / Set)** (p. 34)
		Power on Link	Sets to use Power on Link function **(No / Set)** (p. 34)
	Region Select		Selects the region where you live to adjust the standard time **(NSW / ACT / Victoria / Queensland / South Australia / Western Australia / Northern Territory / Tasmania)** (p. 23)
	Daylight Saving Time		Select time offset from the standard time for Summer Time **(Auto / Off / +1/2 Hr / +1 Hr)** (p. 23) ● Set to “Auto” normally
	Software Licence		Displays the software licence information
	System Information		Displays the system information of this TV

● A different menu will be displayed while PC, DVI to HDMI adapter cable or SD Card is used. (p. 30-31 and p. 33)
● Only available items can be selected.

DVB Settings (DVB mode)

DVB Settings provide access to various advanced features.

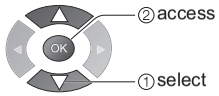
■ To return to TV

EXIT

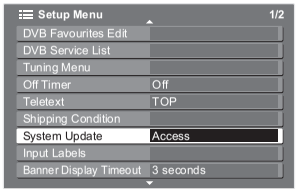
1 If in Analogue mode
Select DVB

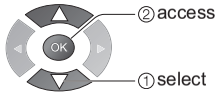
2 **Display the menu**

3 **Select “Setup”**



4 **Select “System Update”, “Region Select” or “Daylight Saving Time”**





5 **Set**

Update TV’s software system — System Update

Download new software to TV.
● For details ➡ p. 40

If System Update is performed, the software will be updated (it may change TV functions). If you do not wish to do so, set “Auto Update Search in Standby” to Off.

Select “Auto Update Search in Standby” and then set “On” or “Off”

● On: Automatically performs a search in standby and downloads an update, if any software updates are available

Note

● When the TV is switched to standby, there will be a clicking sound after a short delay. Similar clicking sounds will also occur at 3:00 AM and 5:00 AM (p. 40) when “Auto update Search in Standby” is set to “On”. These sounds are normal.

■ To update immediately

Select “System Update Search Now”

Searches for an update (for several mins.) and displays a corresponding message if any

Download

OK

● Download may take for about 20 mins.

Note

● During downloading, the TV will display a blank screen for 40 to 50 seconds. Do not interrupt the TV during this procedure.

Adjust the standard time — Region Select

Select the region where you live to adjust the standard time.
● The time contained in the broadcast signal is UTC (Universal Time coordinated) formally known as GMT (Greenwich Mean Time).

Region	Standard time	Daylight Saving Time: Auto (During Summer Time)
NSW / ACT	+10:00	+11:00
Victoria		
Queensland	+10:00	
South Australia	+9:30	+10:30
Western Australia	+8:00	+9:00
Northern Territory	+9:30	
Tasmania	+10:00	+11:00

(Based on GMT)

Adjust for Summer Time — Daylight Saving Time

Select time offset from the standard time for Summer Time.
● Normally select “Auto”.
● If there is a gap between displayed time and actual time, set this function.

Editing Programmes

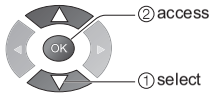
You can make your favourite programme lists and skip unwanted programmes, etc.

1 Select DVB or Analogue

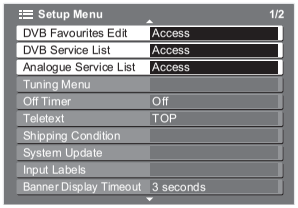
- "DVB Favourites Edit" and "DVB Service List" are available in DVB mode only.
- "Analogue Service List" is available in Analogue mode only.

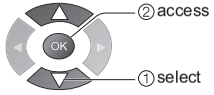
2 Display the menu

3 Select "Setup"



4 Select "DVB Favourites Edit", "DVB Service List" or "Analogue Service List"





5 Set

■ **To return to TV**

EXIT

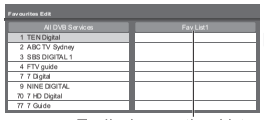
List favourite programmes

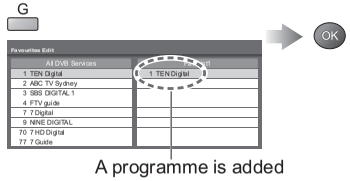
DVB Favourites Edit

(DVB mode)

Create your favourite programme list from various broadcasters (up to 4: Fav List1 / Fav List2 / Fav List3 / Fav List4).
The list is added to "Favourites" list in TV Guide (p. 13) and information banner (p. 11) and then easily accessed.

Select a programme and add it to the list





■ **To edit List**

Select the field of List to edit and:

- To name the List ➡ R ➡ Select the character ➡ OK ➡ RETURN
- To move the programme ➡ G ➡ Select the new position ➡ Confirm G ➡ OK
- To delete the programme ➡ Y ➡ OK
- To delete all programmes ➡ B ➡ OK

Note

- Programme numbers (known as logical channel numbers) are defined by the broadcaster and cannot be changed.
- Hidden services (see below) can be selected but not viewed.

Skip unwanted programmes

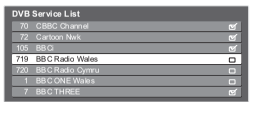
DVB Service List

Analogue Service List

You can hide unwanted services. The deleted services cannot be displayed except in this function. Use this function to skip unwanted programmes.

- "DVB Service List" is listed all tuned DVB programmes in DVB mode.
- "Analogue Service List" is listed all tuned Analogue programmes in Analogue mode.

Select a service and add / delete



- To retune each programme (Manual Tuning) ➡ R (p. 27)

Edit analogue programmes (Change name, Move)

Analogue Service List

You can change the programme name and programme position for Analogue programmes.

- This function is available in Analogue mode.
- If a VCR is connected only with the RF cable, edit "VCR".

① **Select the programme to edit**

② **Edit**

■ **To change the name displayed when selecting programmes**

Select "Rename" G ➡ Set characters (① select, ② set) ➡ Store RETURN

(maximum: five characters)

■ **To move the programme position**

Y ➡ Select new position (select) ➡ Store Y

Tuning Programmes

You can retune all the TV programmes when moving house or search for new services which may have recently started broadcasting.

1 Select DVB or Analogue

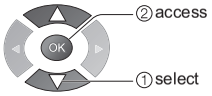
TV

- "DVB Manual Tuning", "Add New DVB Services", "New Service Message" and "DVB Signal Display" are available in DVB mode only.
- "Analogue Manual Tuning" is available in Analogue mode only.

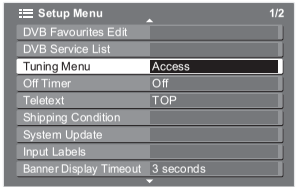
2 Display the menu

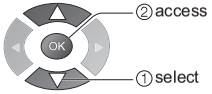
MENU

3 Select "Setup"

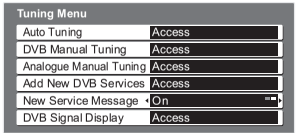


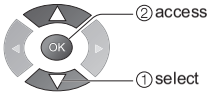
4 Select "Tuning Menu"





5 Select a function





6 Set

■ **To return to TV**

EXIT

■ **For Auto Tuning, using the buttons on the front of the TV** (p. 8)

① Press repeatedly until "Auto Tuning" appears

F

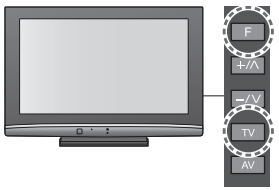
② Access "Auto Tuning"

TV

③ Start "Auto Tuning"

TV

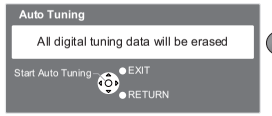
- To return to TV ➡ F



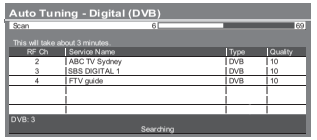
Set all DVB or Analogue programmes automatically — Auto Tuning

Automatically retune all DVB or Analogue programmes received in the area.
- Only DVB programmes are retuned in DVB mode.
- Only Analogue programmes are retuned in Analogue mode.

Start Auto Tuning



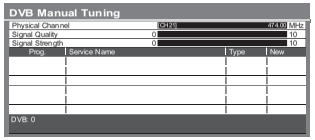
Settings are made automatically

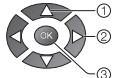


- All the previous tuning settings are erased.
- When the operation is completed, the programme at programme position "1" will be displayed.
- If tuning has not been done completely ➡ "DVB Manual Tuning", "Analogue Manual Tuning"

Set DVB programme manually — DVB Manual Tuning

Normally use "Auto Tuning" or "Add New DVB Services" to add DVB programmes to your service list.
If tuning has not been done completely or for adjusting the direction of the aerial, use this function.





- All services found will be added to the DVB Service List.

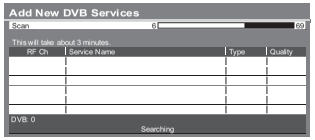
Set Analogue programme manually — Analogue Manual Tuning

Set Analogue programme manually after Auto Tuning.
- If a VCR is connected only with the RF cable, select programme position "0".

Select the programme position → Select the programme → Search and store

Add DVB programme automatically — Add New DVB Services

Any new services found will be added to the DVB Service List.



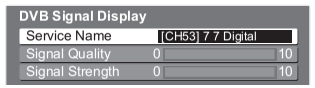
- The new service is added with the current settings saved as they are.

Display a notification message — New Service Message

Selects whether to give a notification message when a new DVB service is found. **(Off / On)**

Check DVB signal — DVB Signal Display

Selects a programme and checks the DVB signal condition.
- To change the programme

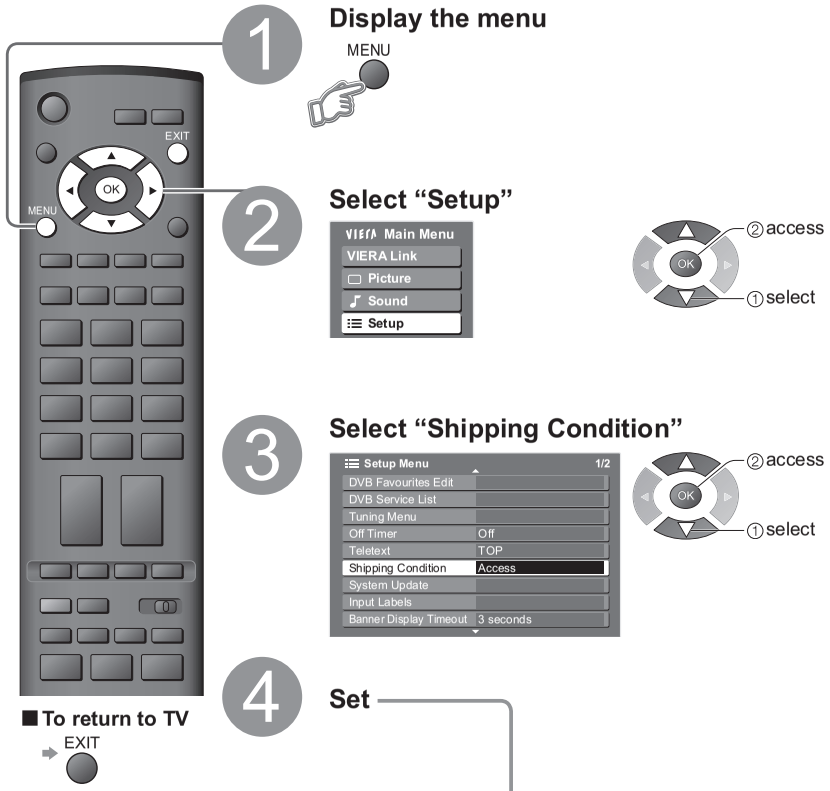


A good Signal Strength is not an indication of suitable signal for DVB reception. Please use the Signal Quality indicator as follows:

Signal Quality:
- Green bar ➡ Good
- Yellow bar ➡ Poor
- Red bar ➡ Bad (Check the aerial)

Restore Settings

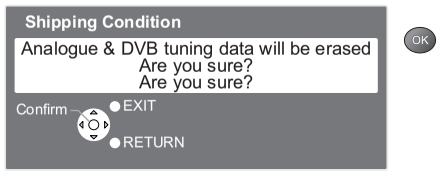
Resets the TV to its original condition, i.e. no programmes tuned in.
All settings (programmes, picture, sound quality, etc.) are reset.



Restore Settings

Shipping Condition

① Check the message and initialise



② Follow the on-screen instructions

- “Auto Tuning” will automatically start when Mains power On / Off switch is next turned On. (p. 9)

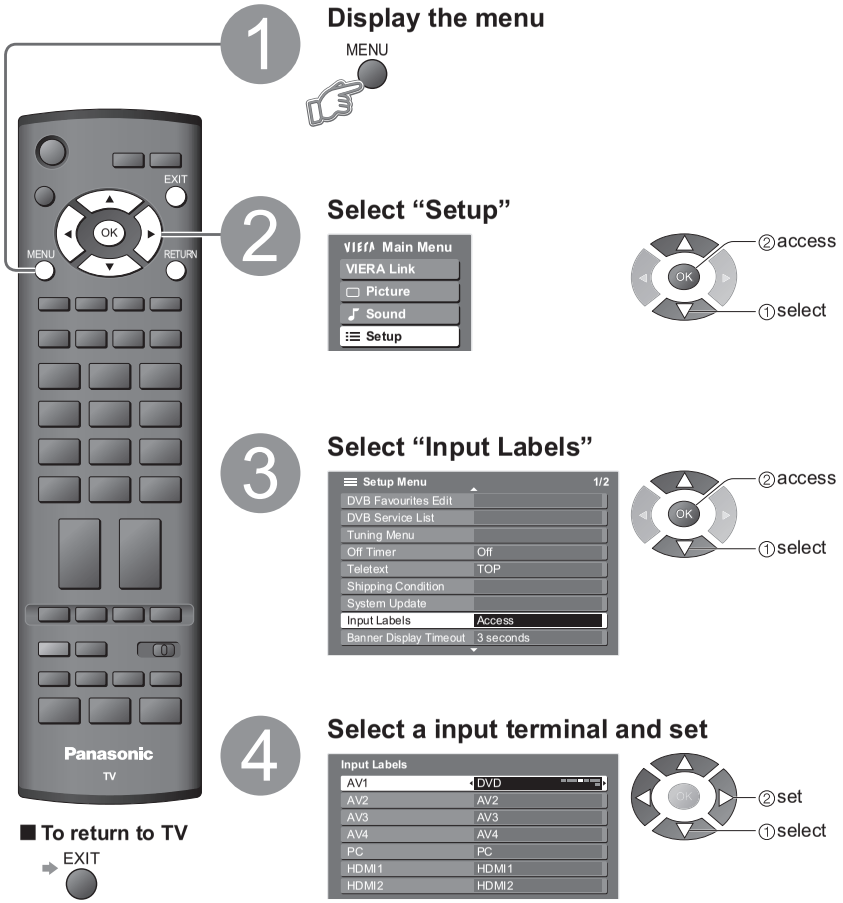
■ To retune TV programmes only, e.g. after moving house

➡ “Auto Tuning” (p. 27)

Input Labels

For easier identification and selection of the input mode, you can label each input terminals or skip terminal that is not connected to any equipment.

- To select the input mode ➡ p. 14

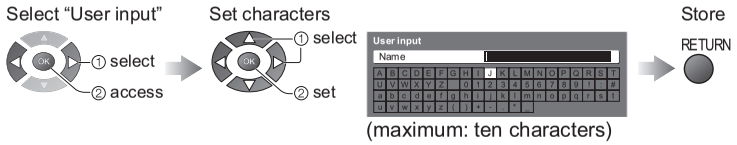


The labels you set will be displayed in “Input Selection” menu (p. 14) or banner.

- If “Skip” is selected, you cannot select the mode.

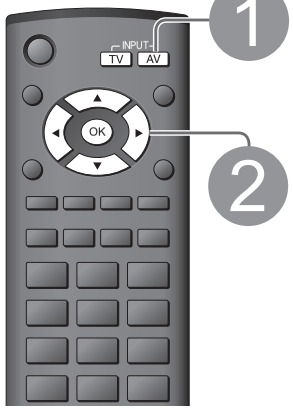
■ User input

You can name each input terminals freely.



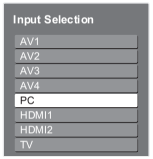
Displaying PC Screen on TV

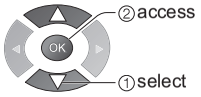
The screen of the PC connected to the TV can be displayed on the TV.
You can also listen to PC sound with the audio cable connected.
● To connect PC ➡ p. 39



1 Select the external input

2 Select “PC”

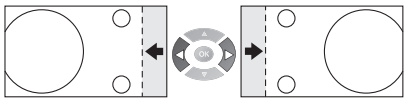
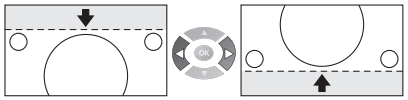




● Corresponding signals (p. 42)
● If “H-freq.” or “V-freq.” is shown in red, the signals may not be supported.
● PC Audio input is via AV2 Audio connection. (p. 39)

■ **To return to TV**
➡ TV

■ **PC menu setting** (changed as desired)
● To make settings ➡ “How to Use Menu Functions” 1 to 4 (p. 18)

Menu	Item		Adjustments / Configurations (options)
Picture	Advanced PC Settings	R-Gain	Adjusts the white balance for red areas
		G-Gain	Adjusts the white balance for green areas
		B-Gain	Adjusts the white balance for blue areas
		Gamma	**(2.0 / 2.2 / 2.5)**
		Reset PC Settings	Press the OK button to reset to the default Picture settings
Setup	PC Setup	Input Resolution	Switches to a wide view ● VGA (640 × 480 pixels), WVGA (852 × 480 pixels), XGA (1,024 × 768 pixels), WXGA (1,366 × 768 pixels) ● Options change depending on signals
		Clock	Set to the minimum level if noise occurs
		H-pos	Adjusts horizontal position 
		V-pos	Adjusts vertical position 
		Clock Phase	Eliminates flicker and distortion ● Adjust after Clock adjustment ● Set to the minimum level if noise occurs
		Sync	PC sync signal type **(H & V / SOG)** ● H & V : Horizontal and Vertical sync from your PC (Most common sync format) SOG : Sync on Green sync from your PC
		Reset PC Settings	Press the OK button to reset to the default Setup settings

● Other items ➡ p. 20 and p. 21

HDMI Functions

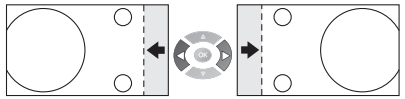
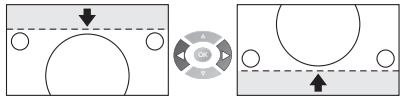
HDMI (high-definition multimedia interface) allows you to enjoy high-definition digital images and high-quality sound by connecting the TV and the equipment.
HDMI-compatible equipment (*1) with an HDMI or DVI output terminal, such as a set top box, a DVD player or a game equipment, can be connected to the HDMI terminal using an HDMI compliant (fully wired) cable.
About connections, see “External Equipment” (p. 38).

Note

● HDMI is the world’s first complete digital consumer AV interface complying with a non-compression standard.
● Audio settings can be made on the “HDMI1 Input” menu screen. (p. 20)
● Applicable audio signal sampling frequencies (2ch L.PCM): 48 kHz, 44.1 kHz, 32 kHz
● HDMI2 terminal is for digital audio signal only.
● Use with a PC is not guaranteed. Only HDMI video formats in page 42 HDMI table are applicable.
● If the connected equipment has an aspect adjustment function, set the aspect ratio to “16:9”.
● These HDMI connectors are “type A”.
● These HDMI connectors are compatible with HDCP (High-Bandwidth Digital Content Protection) copyright protection.
● An equipment having no digital output terminal may be connected to the input terminal of either “COMPONENT”, “S-VIDEO”, or “VIDEO” to receive analogue signals.
● The HDMI input terminal can be used with only the following image signals:
480i, 480p, 576i, 576p, 720p, 1080i and 1080p. Match the output setting of the digital equipment.
● For details of the applicable HDMI signals, see p. 42.

■ **DVI connection**
● If the external equipment has only a DVI output, connect to the HDMI1 terminal via a DVI to HDMI adapter cable (*2).
● When the DVI to HDMI adapter cable is used, connect the audio cable to the audio input terminal (HDMI1: use AV2 IN AUDIO terminals).

■ **DVI Position Settings**
If the picture position is not fit to the screen during the DVI connection, adjust the position on “DVI Position Settings” in Setup Menu. The settings are memorized for each HDMI terminals and input signals.
● To make settings ➡ “How to Use Menu Functions” 1 to 4 (p. 18)

Menu	Item		Adjustments
Setup	DVI Position Settings	H-pos	Adjusts horizontal position 
		V-pos	Adjusts vertical position 
		Reset DVI Position Settings	Press the OK button to reset to the default Setup settings

(*1): The HDMI logo is displayed on HDMI-compliant equipment.
(*2): Enquire at your local digital equipment retailer shop.

Viewing from SD Card (Photos)

Still images recorded by digital cameras will be displayed.

■ **To return to TV**

EXIT ➡ or SD CARD

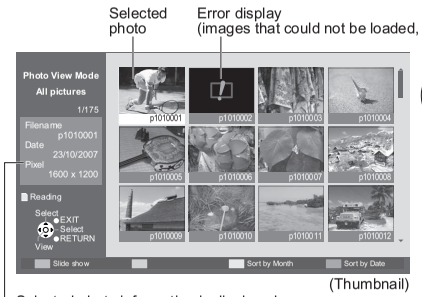
1 Insert the SD Card

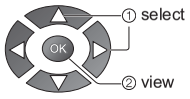
2 Enter SD mode (Photo View Mode)

OK

● All photos in SD Card are displayed by thumbnail.

3 Select the photo to be viewed





(Thumbnail)

● Slide show ➡ p. 33

Selected photo information is displayed
- The maximum number of characters for Filename is 8.
- The photo without record of the date is shown "**/**/****".

■ To sort by date or month recorded

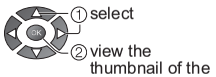
(Sort by Month / Sort by Date)

Display the thumbnail grouped by the same date or the same month

Y (Sort by Month)

B (Sort by Date)

Select the group to be viewed



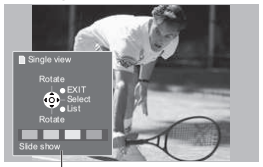
Note

- The group of the photos without record of the date is shown as "Unknown".

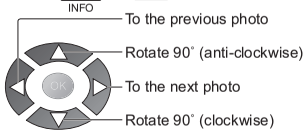
4 View

■ **To display the operation guide** ➡ INFO or OPTION

Displayed one at a time



Operation guide



● To return to thumbnail RETURN

Caution

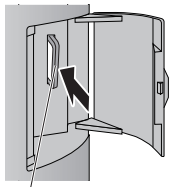
- During the operation, no signals are output from the monitor output terminals.

SD Card

● For details on SD Cards ➡ p. 41

■ **To insert**

■ **To remove**



Slide show

■ **Start Slide show** (operate in step 3 or 4)

① Select the photo for the first view ② Start Slide show

➡ R

● To pause ➡ OK

● To return to Single view ➡ G

Note

- Slide show is done within the same group if started from the view of the group.

■ **Slide show settings** (operate in step 3 or 4)

① Display the menu ② Select "Viewing Setup" ③ Select the items and set

MENU ➡

● "Picture Menu" (p. 20)

Menu	Item	Adjustments / Configurations (alternatives)
Viewing Setup	**Interval**	Select slide show interval **(5 / 10 / 15 / 30 / 60 / 90 / 120 seconds)**
	Repeat	Slide show repeat **(Off / On)**

Cautions in handling SD Card

- Do not remove the card while the TV is accessing data (this can damage card or TV).
- Do not touch the pins on the back of the card.
- Do not subject the card to a high pressure or impact.
- Insert the card in the correct direction (otherwise, card may be damaged).
- Electrical interference, static electricity, or erroneous operation may damage the data or card.
- Back up the recorded data at regular intervals in case of deteriorated or damaged data or erratic operation of the TV. (Panasonic is not liable for any deterioration or damage of recorded data.)

On screen messages

Message	Meaning / Action
Cannot read file	● The file is broken or unreadable. ● The TV does not support the format. (For the applicable formats and data, see p. 41.)
Is SD Card in?	● Insert a SD Card.
No valid file to play	● The card has no data.
Over 9999 pictures found	● Maximum valid number of photos is 9,999.

VIERA Link "HDAVI Control™"*

*Enjoy additional HDMI Inter-Operability with Panasonic products which have "HDAVI Control" function. This TV supports "HDAVI Control 3" function.
Connections to the equipment (DIGA Recorder, HD Video Camera, Player theatre, Amplifier, etc.) with HDMI cable allow you to interface them automatically.
These features are limited to models incorporating "HDAVI Control" and "VIERA Link".

- Some functions are not available depending on the equipment's version of HDAVI Control. Please confirm the connected equipment's version of HDAVI Control.
- VIERA Link "HDAVI Control", based on the control functions provided by HDMI which is an industry standard known as HDMI CEC (Consumer Electronics Control), is a unique function that we have developed and added. As such, its operation with other manufacturers' equipment that supports HDMI CEC cannot be guaranteed.

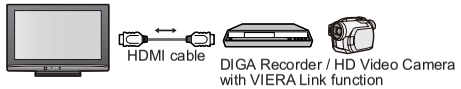
Please refer to individual manuals for other manufacturers' equipment supporting VIERA Link function. About applicable Panasonic equipment, consult your local Panasonic dealer.

■ Summary of VIERA Link functions

● Easy playback	● Power on link	● Power off link	● Speaker control
● Control the menu of the connected equipment by VIERA remote control (Available with the equipment which has "HDAVI Control 2" or "HDAVI Control 3" function.)			
● Pause Live TV programme	● Direct TV Recording (Available with the equipment which has "HDAVI Control 3" function.)		

■ Connections

Read the manual of the equipment, too.

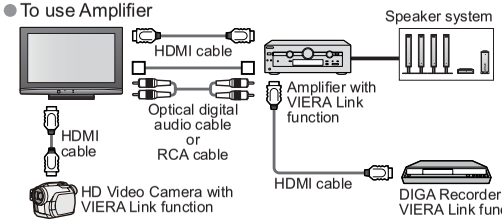


- HDMI cable
  Use fully wired HDMI compliant cable.
  Non-HDMI-compliant cables cannot be utilized.
  Recommended Panasonic's HDMI cable part number:
  • RP-CDHG10 (1.0 m) • RP-CDHG30 (3.0 m)
  • RP-CDHG15 (1.5 m) • RP-CDHG50 (5.0 m)
  • RP-CDHG20 (2.0 m)

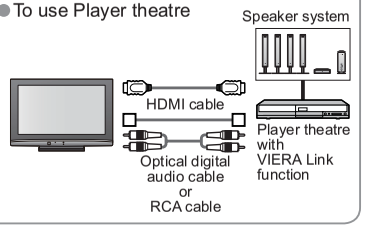
- Connect the equipment supporting VIERA Link to the TV's HDMI1 or HDMI2 terminals via fully wired HDMI cables.

For Speaker control (Home Cinema)

- To use Amplifier



- To use Player theatre



■ Preparations

- Connect the equipment supporting VIERA Link.
- Set up the connected equipment. Read the manual of the equipment.
- For optimal recording, the settings of the recorder might be required. For details, read the manual of the recorder.
- Set VIERA Link On in Setup Menu ➡ "VIERA Link" (p. 18-19, 21)
- Set up the TV ➡ **After connection, turn the equipment on and then switch the TV on. Select the input mode to HDMI1 or HDMI2 (p. 14), and make sure that an image is displayed correctly.**
  This setup should be done each time when the following conditions occur:
  • for the first time / • when adding or reconnecting equipment / • when changing setup

■ Features available

Easy playback

Automatic Input switching - When the connected equipment is operated, input mode is switched automatically. When it is stopped operating, input mode is not returned.

Power on link

Set Power on Link "Set" in Setup Menu to use this function
➡ "Power on Link" (p. 18-19, 21)
When the connected equipment starts playback or direct navigator / function menu for the equipment are activated, the TV is automatically turned on. (Only when TV is in Standby mode.)

Power off link

Set Power off Link "Set" in Setup Menu to use this function
➡ "Power off Link" (p. 18-19, 21)
When TV is set to Standby mode, the connected equipment is also automatically set to Standby.

- This function will work even if the TV enters standby mode automatically by Off Timer function or auto power standby function.

- The TV remains on even if the "VIERA Link" compatible equipment is turned off.

■ Features available (Using VIERA Link Menu)

Pause Live TV programme

(HDAVI Control 3 and Recorder with HDD)

Pause Live TV

You can pause the live TV programme and resume later.

- This function is available with DIGA Recorder which has HDD and "HDAVI Control 3" function.
- If you cannot operate, check the settings and the equipment ➡ "Preparations" (p. 34)
- Available conditions:
  • when watching TV programme
  • when watching the input from DIGA Recorder

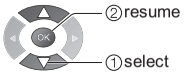
Access and pause the live TV programme

① **Display "VIERA Link Menu"**

② **Select "Pause Live TV" and pause**

- Live TV programme is recorded on HDD from where it was paused.

■ **To resume** (stop pause)
Select "Pause Live TV" and access



- About the operations after resuming, read the manual of the equipment.

■ **To return to Live TV**
(cancel pause or resumed playback)
➡ TV (change the input mode)

- If you cancel pause or resumed playback, the recorded programme will be deleted from HDD.

Direct TV Recording - What you see is What you record (HDAVI Control 3)

Direct TV Rec

Recording the current programme in DIGA Recorder immediately.

- This function is available with DIGA Recorder which has "HDAVI Control 3" function.
- If you cannot operate, check the settings and the equipment ➡ "Preparations" (p. 34)
- Available conditions:
  • when watching TV programme
- The recording is performed by using the tuner of DIGA Recorder.
  Changing programme, input mode or turning off the TV is available during the recording.

① **Display "VIERA Link Menu"**

② **Select "Direct TV Rec" and start recording**

■ **To stop recording**
Select "Stop" in "Direct TV Rec" and access

VIERA Link "HDAVI Control™"

■ **Features available** (Using VIERA Link Menu)

Control the menu of the connected equipment by VIERA remote control
(HDAVI Control 2, HDAVI Control 3)

VIERA Link Control

You can control some functions of the connected equipment with this TV remote control (point the remote control at the TV's signal receiver).

- This function is available with the equipment which has "HDAVI Control 2" or "HDAVI Control 3" function.
- If you cannot operate, check the settings and the equipment ➡ "Preparations" (p. 34)

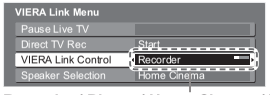
Access and operate the menu of the equipment

① **Display "VIERA Link Menu"**

② **Select "VIERA Link Control"**

③ **Select the equipment you want to access**

- "Home Cinema" means Player theatre, Recorder theatre and Amplifier.



Recorder / Player / Home Cinema / Video Camera

The type of the connected equipment is displayed.
Select the type of the equipment and access.

The menu of the accessed equipment
(Input mode will be changed automatically)

④ **Operate the menu of the equipment**

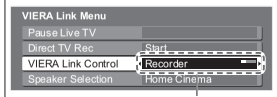
- Available VIERA remote control buttons (depending on the connected equipment):

OK	Move the cursor / select the menu
OK	Move the cursor / access / adjust
OK	Store / set / access
RETURN	Return to the previous menu
EXIT	Exit the menu
OPTION	Display the operation guide for the equipment / The same functions with the OPTION button of the equipment
R G Y B	Access when the key words are displayed on colour bar

- About the operations for the equipment, read the manual of the equipment.

■ **If you access the invalid equipment**

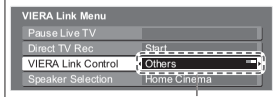
When the equipment with "HDAVI Control" function is connected



Recorder / Player / Home Cinema / Video Camera

The type of the connected equipment is displayed.
But you cannot access it. Use its own remote control to operate the equipment.

When the equipment of other types or manufacturers is connected



Others

"Others" is displayed.
You cannot access it. Use its own remote control to operate the equipment.

■ **Features available** (Using VIERA Link Menu)

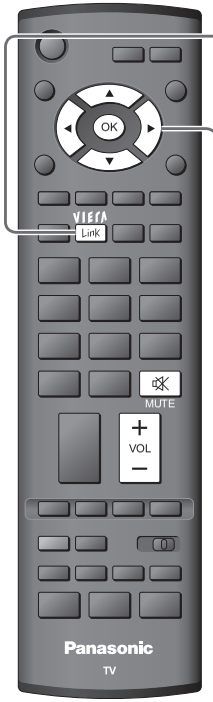
Speaker control

Speaker Selection

You can control the theatre speaker with this TV remote control (point the remote control at the TV's signal receiver).

- This function is available with the Amplifier or Player theatre which has "HDAVI Control" function.
- If you cannot operate, check the settings and the equipment ➡ "Preparations" (p. 34)

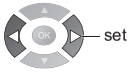
Access and control the speaker volume



① **Display "VIERA Link Menu"**

② **Select "Speaker Selection"**

③ **Set to "Home Cinema" or "TV"**



■ **Home Cinema**
Amplifier or Player theatre will be automatically turned on if it is in Standby mode and the sound is from theatre speakers connected to the equipment.

- Volume up / down ➡ VOL
- Mute ➡ MUTE
- The sound of TV speakers is mute.
- When the equipment is turned off, TV speakers will be active.

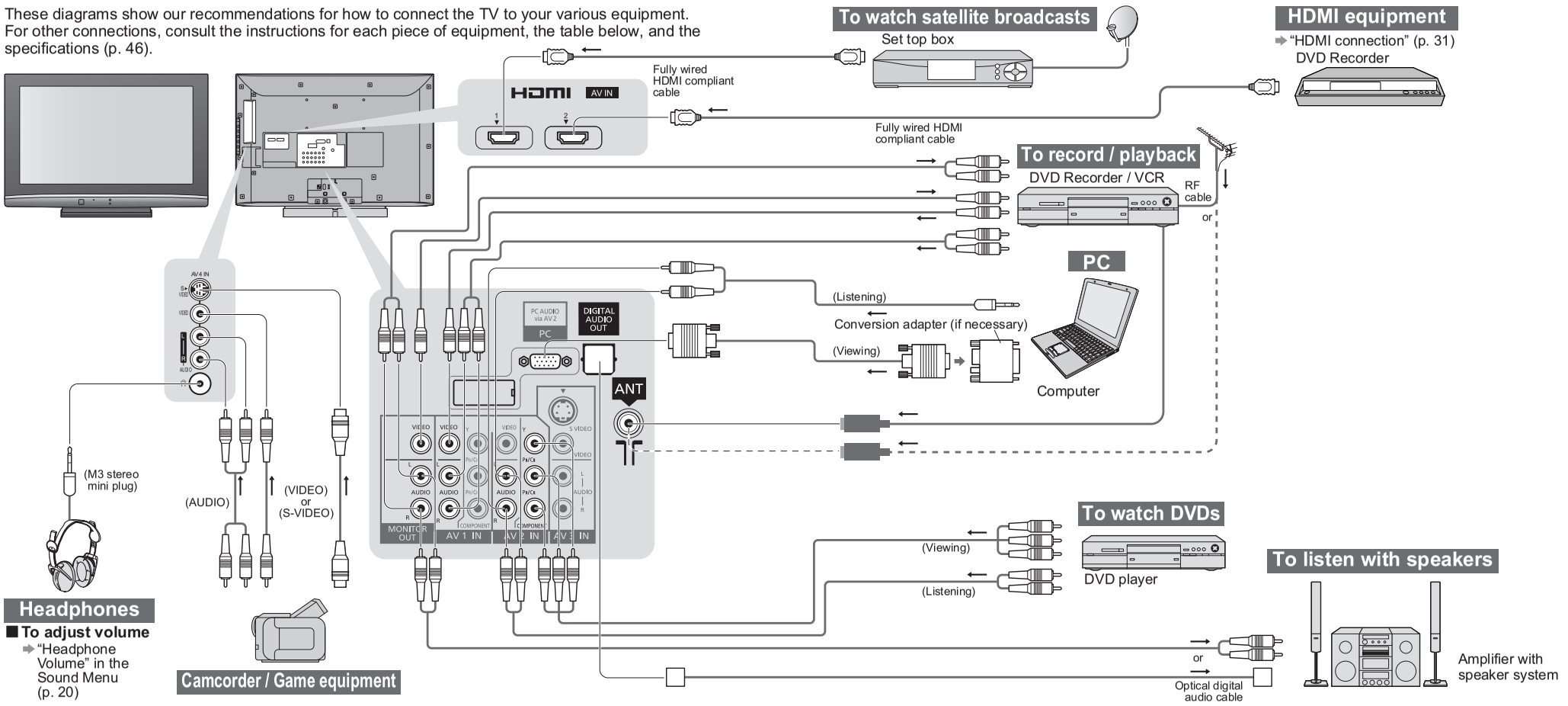
■ **TV**
TV speakers are active.

Note

- This function may not work properly depending on the connected equipment.
- Image or sound may not be available for the first few seconds when the playback starts.
- Image or sound may not be available for the first few seconds when Input mode is switched.
- Volume function will be displayed when adjusting the volume of the equipment.
- Easy playback is also available by using the remote control for Amplifier or Player theatre. Read the manual of the equipment.
- About HDMI cable for connecting Panasonic HD Video Camera, read the manual of the equipment.
- If more than one equipment of the same type are connected to the TV by HDMI cables, for example two DIGA Recorders to HDMI1 and HDMI2, VIERA Link will only be available for the lower terminal number, in this case HDMI1.
- "HDAVI Control 3" is the newest standard (current as of December, 2007) for HDAVI Control compatible equipment. This standard is compatible with conventional HDAVI equipment.
- To confirm this TV's version of HDAVI Control ➡ "System Information" (p. 21)

External Equipment

These diagrams show our recommendations for how to connect the TV to your various equipment. For other connections, consult the instructions for each piece of equipment, the table below, and the specifications (p. 46).

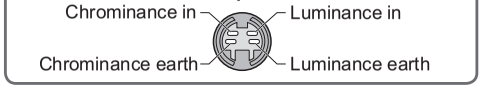


■Types of connectable equipment to each terminal

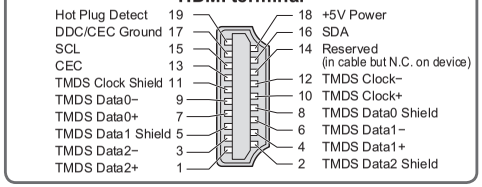
Terminal / Recording / Playback (equipment)	AV1 IN	AV2 IN	AV3 IN	AV4 IN (Side of TV)	MONITOR OUT	DIGITAL AUDIO OUT	HDMI 1	HDMI 2
To record / playback videocassettes / DVDs (VCR / DVD recorder)	○	○	○	○	○			
To watch DVDs (DVD player)	○	○	○	○			○	○
To watch camcorder images (Video camera)	○	○	○	○			○	○
To watch satellite broadcasts (Set top box)	○	○	○	○			○	○
To play games (Game equipment)	○	○	○	○			○	○
To use amplifier with speaker system					○	○		
VIERA Link							○	○

○: Recommended Connection

S VIDEO 4 pin terminal



HDMI terminal



- Connect the S VIDEO or VIDEO terminal when using AV3 / AV4 IN terminals.
- Connect the COMPONENT or VIDEO terminal when using AV1 / AV2 IN terminals.

Technical Information

Programme Allocation (Analogue mode)

CH Display / Receive Programme	CH Display / Receive Programme	CH Display / Receive Programme
CH 0 ⌇ CH 5	S 6 ⌇ S 10	CH 10 ⌇ CH 12
S 2 ⌇ S 5	CH 6 ⌇ CH 9	S 11 ⌇ S 44
CH 5A	CH 9A	CH 20 ⌇ CH 75

Rating (DVB mode)

Rating	Meaning	Rating	Meaning
-	Not classified	M	Mature
P	Pre school	MA 15+	Mature Adult 15+
C	Children	AV 15+	Adult strong Violence 15+
G	General	R	Restricted 18+
PG	Parental Guidance recommended		

Updating the software system (DVB mode)

Update system software to ensure that you have latest version software.
If there is an update available, a notification banner is displayed when the service has the update information.
- To download new software, press “OK” ➡ Downloading (approx. 20 mins.)
  If you choose not to download, press “EXIT”.

■ To update automatically

Set “Auto Update Search in Standby” to “On” (p. 23)
If there is a new version software being broadcast, the TV will download this automatically.
- The automatic updating sequence is carried out at 3:00 AM and 5:00 AM every morning under the following condition.
  Standby (TV turned Off with the remote control)

■ To update manually

Perform “System Update Search Now” (p. 23)
If there is an update available, a notification banner is displayed.
- To download new software, press “OK” ➡ Downloading (approx. 20 mins.)
  If you choose not to download, press “EXIT”.

Note

- During downloading, do not turn Off the TV or touch any buttons.
  (The TV is automatically activated after downloading is completed.)
- When the TV is switched to standby, there will be a clicking sound after a short delay. Similar clicking sounds will also occur at 3:00 AM and 5:00 AM when “Auto update Search in Standby” (p. 23) is set to “On”. These sounds are normal.

Data format for Card browsing

Photo : Still images recorded with digital still cameras compatible with JPEG files of DCF* and EXIF standards
Data format : Baseline JPEG (Sub-sampling 4:4:4, 4:2:2 or 4:2:0)
Max. number of files : 9,999
Image resolution : 160 × 120 to 10,000,000
Transfer rate : 1.6 MB/Sec

- Compliant card type (maximum capacity): SDHC Card (16 GB), SD Card (2 GB), Multi Media Card (128 MB), miniSD Card (1 GB) (requiring miniSD adapter)
- If miniSD Card is used, insert / remove it together with the adapter.
- Check the latest information on the card type at the following website. (English only)
  http://panasonic.co.jp/pavc/global/cs/

*DCF (Design rule for camera file system): Unified standard established by Japan Electronics and Information Technology Industries Association (JEITA).

Note

- A JPEG image modified with a PC may not be displayed.
- Images imported from a PC must be compatible with EXIF (Exchangeable Image File) 2.0, 2.1, and 2.2.
- Partly degraded files might be displayed at a reduced resolution.
- Only “.JPG” extension can be read by this TV.
- The folder and file names may be different depending on the digital camera used.
- Do not use two-byte characters or other special codes.
- The card may become unusable with this TV if the file or folder names are changed.

Stereo / Bilingual Sound Selection (Analogue mode)

When you receive the stereo / bilingual sound system, sound output modes can be selected by “MPX” in the Sound Menu (p. 20).

Audio Signal	STEREO	MAIN Ⅰ	SUB Ⅱ	MONO
Mode Indicator	◯◯	Ⅰ	Ⅱ	▽

NICAM .....Used in New Zealand, Singapore, Hong Kong etc.

Type of broadcast	Regular broadcast (Standard Audio)	Regular + NICAM MONO Ⅰ (MAIN Ⅰ)	NICAM STEREO	NICAM DUAL MONO (MAIN Ⅰ / SUB Ⅱ)
Mode Indicator	No Indicator ⟷ ▽	Ⅰ ⟷ ▽	◯◯ ⟷ ▽	Ⅰ → Ⅱ ↕ ▽ ↵

A2(German) .....Used in Australia, Malaysia etc.

Type of broadcast	Regular broadcast (Standard Audio)	BILINGUAL or DUAL MONO: MAIN Ⅰ / SUB Ⅱ	STEREO
Mode Indicator	No Indicator ⟷ ▽	Ⅰ ⟷ Ⅱ	◯◯ ⟷ ▽

Note

- If the stereo signal is poor or the receiving conditions are not optimum or if STEREO:MONO automatic switching occurs, it is recommended you switch from STEREO to MONO.
- Even when the contents of the receiving signal undergo changes, selection mode is kept intact.
- When the receiving conditions deteriorate, listening will be easier if the mode is set to the MONO position.
- DUAL, also known as DUAL MONO or as BILINGUAL is not currently transmitted in some countries.

Technical Information

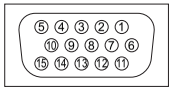
PC connection

A PC may be connected to this TV so that the PC screen is displayed and sound is heard from the TV.
- PC signals that can be inputted: Horizontal scanning frequency 31 to 69 kHz; vertical scanning frequency 59 to 86 Hz (more than 1,024 signal lines could result in incorrect display of the image).
- A PC adapter is not necessary for the DOS/V-compliant D-sub 15-pin connector.

Note
- Some PC models cannot be connected to this TV.
- When using PC, set the colour display quality of PC to the highest position.
- For details of the applicable PC signals, see below.
- Max. display resolution

Aspect	**4:3**	1,024 × 768 pixels
	16:9	1,366 × 768 pixels

- D-sub 15-pin connector signal



Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
①	R	⑥	GND (Ground)	⑪	NC (not connected)
②	G	⑦	GND (Ground)	⑫	NC (not connected)
③	B	⑧	GND (Ground)	⑬	HD
④	NC (not connected)	⑨	NC (not connected)	⑭	VD
⑤	GND (Ground)	⑩	GND (Ground)	⑮	NC (not connected)

Input signal that can be displayed

COMPONENT (Y, P_B/C_B, P_R/C_R)**, HDMI**

∗ Mark: Applicable input signal

Signal name	COMPONENT	HDMI
480i (60 Hz)	∗	∗
480p (60 Hz)	∗	∗
576i (50 Hz)	∗	∗
576p (50 Hz)	∗	∗
720p (60 Hz)	∗	∗
720p (50 Hz)	∗	∗
1,080i (60 Hz)	∗	∗
1,080i (50 Hz)	∗	∗
1,080p (60 Hz)		∗
1,080p (50 Hz)		∗

PC (D-sub 15P)

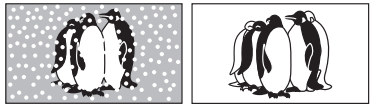
Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)
640 × 400 @70 Hz	31.47	70.07
640 × 480 @60 Hz	31.47	59.94
640 × 480 @75 Hz	37.50	75.00
800 × 600 @60 Hz	37.88	60.32
800 × 600 @75 Hz	46.88	75.00
800 × 600 @85 Hz	53.67	85.06
852 × 480 @60 Hz	31.44	59.89
1,024 × 768 @60 Hz	48.36	60.00
1,024 × 768 @70 Hz	56.48	70.07
1,024 × 768 @75 Hz	60.02	75.03
1,024 × 768 @85 Hz	68.68	85.00
1,280 × 1,024 @60 Hz	63.98	60.02
1,366 × 768 @60 Hz	48.39	60.04
Macintosh13” (640 × 480)	35.00	66.67
Macintosh16” (832 × 624)	49.73	74.55
Macintosh21” (1,152 × 870)	68.68	75.06

Note
- Signals other than above may not be displayed properly.
- The above signals are reformatted for optimal viewing on your display.
- Applicable input signal for PC is basically compatible to VESA standard timing.
- PC signal is magnified or compressed for display, so that it may not be possible to show fine detail with sufficient clarity.

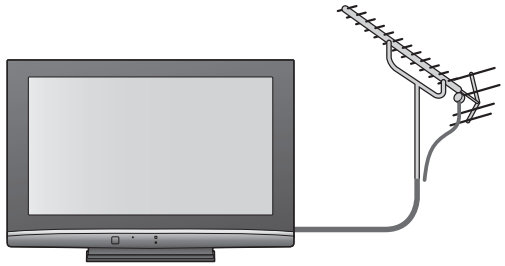
FAQs

Before requesting service or assistance, please follow these simple guides to resolve the problem.
If the problem still persists, please contact your local Panasonic dealer for assistance.

White spots or shadow images (noise)



- Check the position, direction, and connection of the aerial.



Neither image nor sound is produced

- Is the TV in “AV mode”?
- Is the mains lead plugged into the socket outlet?
- Is the TV turned On?
- Check Picture Menu (p. 20) and volume.

An error message appears

- Follow the message’s instructions.
- If the problem persists, contact the authorized Service Centre.

The LCD panel moves slightly when it is pushed with a finger

Clattered sound might be heard

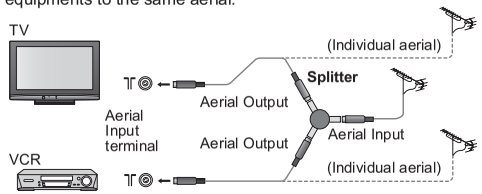
- There are some looseness around the panel to prevent the damage to the panel.
  The panel might move slightly when it is pushed with a finger, and clattered sound might be heard. This is not a malfunction.

Pixel Statement

- An image on a LCD or Plasma TV screen is created by many small groups of dots known as pixels (which is similar to the image in a newspaper). It also naturally follows that higher panel resolutions contain more pixels. To create a colour image, each pixel consists of three tiny coloured dots (known as sub-pixels), one each of red, green and blue. Each one of these dots is precisely controlled by the electronics of the TV to produce the picture.
  Whilst Panasonic maintains the highest standards in manufacturing technology and processes in the construction of these panels, there are a number of allowable pixel/sub-pixel failures that still allow the panel to be defined as a good panel. It is not possible to guarantee absolutely no pixel loss.

	Problem	Actions
Screen	**Chaotic image, noisy**	● Set “P-NR” in the Picture Menu (to remove noise). (p. 20) ● Check nearby electrical products (car, motorcycle, fluorescent lamp).
Screen	**No image can be displayed**	● Is “Colour” or “Contrast” in the Picture Menu set to the minimum? (p. 20)
Screen	**Blurry or distorted image** (no sound or low volume)	● Reset programme. (p. 27)
Screen	**Unusual image is displayed**	● Turn off the TV with Mains power On / Off switch, then turn it on again.
Screen	**“Shop” appears on screen at switch on**	● “Shop” was selected in “Auto Tuning” (p. 9). Reset settings in “Shipping Condition” (p. 28), then select “Home” in “Auto Tuning” (p. 9).
Sound	**No sound is produced**	● Is “Sound mute” active? (p. 8) ● Is the volume set to the minimum?
Sound	**Sound level is low or sound is distorted**	● Sound signal reception may be deteriorated. ● Set “MPX” (p. 20) in the Sound Menu to “Mono”.

FAQs

	Problem	Actions
HDMI	**Sound is unusual**	● Set the sound setting of the connected equipment to “2ch L.PCM”. ● Check the “HDMI1 Input” setting in the Sound Menu. (p. 20) ● If digital sound connection has a problem, select analogue sound connection. (p. 31)
HDMI	**Pictures from external equipment are unusual when the equipment is connected via HDMI**	● Is the HDMI cable connected properly? (p. 38) ● Turn Off the TV and equipment, then turn them On again. ● Check an input signal from the equipment. (p. 42) ● Use an equipment compliant with EIA/CEA-861/861B.
DVB	● Digital TV reception technology requires high quality, robust DTV signals which in some domestic aerial installations, may be relatively poor despite good analogue reception.	
DVB	**Aerial connection when using DTV and VCR / DVD Recorder**	● To maintain optimum signal quality from TV aerial, use a TV aerial splitter (as illustrated) when connecting two or more equipments to the same aerial. 
DVB	**After DVB Auto Tuning only some or no DVB services are found**	● Check to ensure your area is covered by DVB transmissions. ● Check that the aerial and antenna cable are designed for DVB. For your safety, the aerial and cable should be inspected / installed by a licenced installer that should comply with Australian Standard AS1417.1. Note: If you live within 5-10 km of DVB transmission towers, a combined VHF / UHF aerial should be adequate. Outside this area, separate VHF and UHF aerials provide superior reception performance. ● If you live in a unit or apartment, check to ensure the Master Antenna TV (MATV) system is designed for analogue and DVB-T reception. Please consult your body corporate.
DVB	**Picture regularly breaks up on some programmes, or “No Signal” message**	● Check “Signal Display”. (p. 27) If “Signal Quality” or “Signal Strength” are displayed in red or constantly changing, check aerial. If problem persists consult your local TV aerial installer. ● Check that the aerial and antenna cable are designed for DVB. For your safety, the aerial and cable should be inspected / installed by a licenced installer that should comply with Australian Standard AS1417.1. ● Interference (known as impulse noise) from household appliances such as light switches, fridges etc may cause picture break up and / or audio distortion. Use high quality quad shielded coaxial cable fly lead between TV and antenna wall socket to minimise impulse noise pickup. If problem persists consult your local TV aerial installer. ● When “No Signal” message is displayed, check TV aerial connection. ● The received signal may be too weak to allow the TV to reliably lock to the desired “No Signal” programme to generate a stable picture. Repeat the tuning procedure (p. 27). If problem persists consult your local TV aerial installer.
DVB	**Picture very infrequently breaks up on some or all programmes**	● Electrical atmospheric interference caused by local or distant lighting storms or heavy rain with wind in “leafy” locations may cause pictures to break up and audio to mute or distort momentarily. ● Impulse noise interference from an infrequently used electrical appliance, or a passing vehicle or lawn mower with a “noisy” ignition system.

	Problem	Actions
Other	**TV takes so long to turn on**	● Like your computer, the TV has to run a number of diagnostic and software checks before it can display any programmes.
Other	**The programme cannot be changed**	● Is the TV in Teletext mode? (p. 16)
Other	**The programme cannot be selected**	● Is the programme skipped? (p. 25)
Other	**TV goes into “Standby mode”**	● Off Timer function is activated. ● The TV enters “Standby mode” about 30 mins. after analogue broadcasting ends.
Other	**The remote control does not work**	● Are the batteries installed correctly? (p. 6) ● Has the TV been switched On?

Maintenance

First, remove the mains plug from the socket outlet.

Display panel

Regular care: Gently wipe the surface clean of dirt by using a soft cloth.
Major contamination: Wipe the surface clean using a soft cloth dampened with clean water or diluted neutral detergent by 100 times of water. Then, using a soft dry cloth, evenly wipe the surface clean until it is dry.

Caution

- The surface of the display panel has been specially treated and may be easily damaged. Do not tap or scratch the surface with your fingernail or other hard object.
- Use care not to subject the surface to bug repellent, solvent, thinner, or other volatile substances (this may degrade surface quality).

Cabinet

Regular care: Wipe the surface clean using a soft dry cloth.
Major contamination: Dampen a soft cloth with clean water or water containing a small amount of neutral detergent. Then, wring the cloth and wipe the surface clean with it. Finally, wipe the surface clean with a dry cloth.

Caution

- Use care not to subject the TV's surfaces to detergent. (A liquid inside the TV could lead to product failure.)
- Use care not to subject surfaces to bug repellent, solvent, thinner, or other volatile substances (this may deteriorate the surface by peeling the paint).
- Do not allow the cabinet to make contact with a rubber or PVC substance for a long time.

Mains plug

Wipe the mains plug with a dry cloth at regular intervals. (Moisture and dust may lead to fire or electrical shock.)

Licence

- DVB is a trademark of the DVB Digital Video Broadcasting Project (1991 to 1996).
- VGA is a trademark of International Business Machines Corporation.
- Macintosh is a registered trademark of Apple Inc., USA.
- S-VGA is a registered trademark of the Video Electronics Standard Association.
  Even if no special notation has been made of company or product trademarks, these trademarks have been fully respected.
- SDHC Logo is a trademark.
- HDMI, the HDMI Logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
- HDAVI Control™ is a trademark of Panasonic Corporation.
- Manufactured under license from Dolby Laboratories.
  Dolby and the double-D symbol are trademarks of Dolby Laboratories.

Specifications

Power Source			AC 220-240 V, 50 / 60 Hz	
Power Consumption	**Average use**		102 W	
	Standby condition		0.3 W	
Display panel	**Aspect Ratio**		16:9	
	Visible screen size		66 cm (diagonal)	
			575 mm (W) × 323 mm (H)	
	Number of pixels		1,049,088 (1,366 (W) × 768 (H))	
Sound	**Speaker**		120 mm × 60 mm × 2 pcs, 8 Ω	
	Audio Output		20 W (10 W + 10 W), 10 % THD	
	Headphones		M3 (3.5 mm) stereo mini Jack × 1	
PC signals			VGA, SVGA, XGA SXGA ····· (compressed) Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz	
Receiving Systems / Band name		**PAL B/G**	Reception of Off air broadcasts	
		DVB-T	7 MHz VHF / UHF (Australia) free-to-air TV broadcast reception	
		PAL 60 Hz **M.NTSC** **NTSC**	Playback of NTSC tape from some PAL Video recorders (VCR) Playback from M. NTSC Video recorders (VCR) Playback from NTSC Video recorders (VCR)	
Aerial - Rear			Standard Belling & Lee connector	
Operating Conditions			**Temperature** : 0 °C - 35 °C **Humidity** : 20 % - 80 % RH (non-condensing)	
Connection Terminals	**AV1 Input**	**AUDIO L - R**	RCA PIN Type × 2	0.5 V[rms]
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
		COMPONENT	Y P_B/C_B, P_R/C_R	1.0 V[p-p] (including synchronization) ±0.35 V[p-p]
	AV2 Input	**AUDIO L - R**	RCA PIN Type × 2	0.5 V[rms]
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
		COMPONENT	Y P_B/C_B, P_R/C_R	1.0 V[p-p] (including synchronization) ±0.35 V[p-p]
	AV3 Input	**AUDIO L - R**	RCA PIN Type × 2	0.5 V[rms]
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
		S VIDEO	Mini DIN 4-pin	Y:1.0 V[p-p] (75 Ω) C:0.286 V[p-p] (75 Ω)
	AV4 Input	**AUDIO L - R**	RCA PIN Type × 2	0.5 V[rms]
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
		S VIDEO	Mini DIN 4-pin	Y:1.0 V[p-p] (75 Ω) C:0.286 V[p-p] (75 Ω)
	Monitor Output	**AUDIO L - R**	RCA PIN Type × 2	0.5 V[rms] (high impedance)
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
	Others	**HDMI1 / 2 Input**	TYPE A Connectors	● This TV supports “HDAVI Control 3” function.
		PC Input	HIGH-DENSITY D-SUB 15PIN	R, G, B/0.7 V[p-p] (75 Ω) HD, VD/TTL Level 2.0 - 5.0 V[p-p] (high impedance) (PC AUDIO via AV2 Input Audio L-R)
		DIGITAL AUDIO OUT	PCM / Dolby Digital, Fiber optic	
		Card slot	SD CARD slot × 1	
Dimensions (W × H × D)			700 mm × 505 mm × 225 mm (With TV Stand) 700 mm × 466 mm × 108 mm (TV only)	
Mass			13.0 kg Net	

Note

● Design and Specifications are subject to change without notice. Weight and Dimensions shown are approximate.

WARRANTY - Australia only

1. The product is warranted for 12 months from the date of purchase. Subject to the conditions of this warranty Panasonic or it's Authorised Service Centre will perform necessary service on the product without charge for parts or labour if, in the opinion of Panasonic, the product is found to be faulty within the warranty period.
2. This warranty only applies to Panasonic products purchased in Australia and sold by Panasonic Australia or its Authorised Distributors or Dealers and only where the products are used and serviced within Australia or it's territories. Warranty cover only applies to service carried out by a Panasonic Authorised Service Centre and only if valid proof of purchase is presented when warranty service is requested.
3. This warranty only applies if the product has been installed and used in accordance with the manufacturer's recommendations (as noted in the operating instructions) under normal use and reasonable care (in the opinion of Panasonic). The warranty covers normal domestic use only and does not cover damage, malfunction or failure resulting from use of incorrect voltages, incorrect installation, accident, misuse, neglect, build-up of dirt or dust, abuse, maladjustment of customer controls, mains supply problems, thunderstorm activity, infestation by insects or vermin, tampering or repair by unauthorised persons (including unauthorised alterations), exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.
4. This warranty does not cover the following items unless the fault or defect existed at the time of purchase:
   (a) Video or Audio Tapes
   (b) Video or Audio Heads and Stylii resulting from wear and tear in normal use
   (c) Shaver Heads or Cutters
   (d) Cabinet Parts
   (e) User replaceable Batteries
   (f) Thermal Paper, Toner/Ink Cartridges, Drums, Developer, Film (Ink/Ribbon), Film Cartridge, Printer Heads
   (g) Microwave Oven cook plates.
   (h) Kneader mounting shaft unit (bread bakery)
5. If warranty service is required you should:
   • Telephone Panasonic's Customer Care Centre on 132600 or visit our website and use the Service Centre Locator for the name/address of the nearest Authorised Service Centre.
   • Send or bring the product to a Panasonic Authorised Service Centre together with your proof of purchase receipt as a proof of purchase date. Please note that freight and insurance to and / or from your nearest Authorised Service Centre must be arranged by you.
   • Note that home or pick-up/delivery service is available for the following products in the major metropolitan areas of Australia or the normal operating areas of the nearest Authorised Service Centres:
   (a) Picture tube (CRT) based Television Receivers (screen sizes greater than 66cm); Rear Projection TV's; Plasma/LCD televisions / displays (screen size greater than 103 cm)
   (b) Convection/Combination Microwave Ovens
   (c) Whiteboard (except portable type)
6. The warranties hereby conferred do not extend to, and exclude, any costs associated with the installation, de-installation or re-installation of a product, including costs related to the mounting, de-mounting or remounting of any screen, (and any other ancillary activities), delivery, handling, freighting, transportation or insurance of the product or any part thereof or replacement of and do not extend to, and exclude, any damage or loss occurring by reason of, during, associated with, or related to such installation, de-installation, re-installation or transit.

Panasonic Authorised Service Centres are located in major metropolitan areas and most regional centres of Australia, however, coverage will vary dependant on product. For advice on exact Authorised Service Centre locations for your product, please telephone our Customer Care Centre on 132600 or visit our website and use the Service Centre Locator.

Unless otherwise specified to the consumer the benefits conferred by this express warranty are additional to all other conditions, warranties, guarantees, rights and remedies expressed or implied by the *Trade Practices Act 1974* and similar consumer protection provisions contained in legislation of the States and Territories and all other obligations and liabilities on the part of the manufacturer or supplier and nothing contained herein shall restrict or modify such rights, remedies, obligations or liabilities. *November 2005*

THIS WARRANTY CARD AND THE PURCHASE DOCKET (OR SIMILAR PROOF OF PURCHASE) SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES

If you require assistance regarding warranty conditions or any other enquiries, please visit the Panasonic Australia website

www.panasonic.com.au or by phone on 132 600

If phoning in, please ensure you have your operating instructions available.

Panasonic Australia Pty. Limited
ACN 001 592 187 ABN 83 001 592 187
Locked Bag 505, Frenchs Forest, NSW 2086
www.panasonic.com.au

PRO-031-F01 Issue: 3.0 23-11-2005